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ABSTRACT

This paper presents survey results of the attitudes and practices of elementary school board members in Ontario, Canada in relation to early identification of children's learning abilities and related intervention. A short questionnaire, intended to provide a global picture of early identification work being carried out was sent to all elementary school boards in Ontario. In order to provide a more developed analysis, a second, more detailed, questionnaire was sent to a sample of 27 boards: representatives from this group were then given an extensive interview. School boards were requested to provide information about: (1) rationales for programs, including goals and reasons for inception; (2) the existing programs and procedures used in both identification and intervention work; and (3) the maintenance of programs, including such topics as money, time, and type of personnel involved in the programs, program evaluation, and in-service training. In general, it was found that a wide variety of practices, perceptions, and attitudes exist among school boards regarding early identification and intervention. Lack of clarity and lack of consistency with regard to purpose, goals, procedures, and techniques were frequently apparent within and between school boards. Recommendations emphasize the need of the Ministry of Education to take a strong leadership role in advocating the concepts and practices of identification and intervention programs. (Author/MP)

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LEARNING ABILITIES: IDENTIFICATION AND INTERVENTION PRACTICES

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Abstract

Between December 1978 and April 1979, a survey was made of current early identification and intervention practice in Ontario school boards. Information was gathered from all elementary school boards in Ontario through the use of a short questionnaire. A second, more detailed questionnaire was sent to a sample of 27 boards, and representatives from this group were then given an extensive interview. Perceptions and attitudes of school boards were sought, as well as factual data, especially through the interviews. Information was requested about:

1. Rationales for programs, including goals and reasons for inception.
2. The existing programs, a category which included the actual programs and procedures used in both identification and intervention work, for example, selection of procedures, timing, characteristics assessed, sources of referral, the relationship between identification and intervention, and the role of different educational and related personnel. Within this framework techniques such as instruments and tests were examined and lists compiled of materials currently in use in Ontario.
3. The maintenance of programs, including such topics as the amount of money, time, and type of personnel involved in programs, evaluation, in-service training, and implications for curricular change.

The study found a wide variety of practice, perceptions, and attitudes among school boards regarding early identification and intervention.

Lack of clarity about purpose was frequently apparent within boards, and lack of consistency between boards with regard to goals, procedures, and techniques. Virtually all boards agreed on the need for early identification and intervention, showing concern with the development of relevant programs. However, they tended to discuss such programs somewhat

as "extras" peripheral to the educational system rather than as integral parts or dimensions of that system in the early years of schooling. Teachers were given prominence in questionnaires and interviews regarding the centrality of their roles in identification and intervention work and their need for increased in-service training.

Comment was made in the report on the general and specific findings of the survey within the authors' conceptual framework. They emphasized a developmentally based approach to the early assessment of all children at school entry, in order to provide teachers with a "flying start" in the teaching of all pupils in a class. They further suggested that the identification of children's special needs or difficulties would be more suitably conducted as part of this developmental review process. This position, not presented to interviewees until after the completion of basic questions, found many echoes among school board personnel.

Recommendations were developed as a result of the study emphasizing the need for the Ministry of Education to take a strong leadership role in advocating the concept and practice of developmental review. The suggested means of doing so was the establishment of a Task Force with responsibility for the development of a training curriculum, for the training of senior school board personnel, and for assistance to school boards in implementing intensive in-service programs. It was recommended further that boards encourage much greater involvement by parents in early identification and intervention programs, for example, as co-assessors. It was also recommended that they institute greatly increased in-service training programs in collaboration with the Task Force of the Ministry of Education.

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1 Introduction to the Study

SCOPE OF THE STUDY

The research study described in this report was conducted under contract to the Ministry of Education, Ontario, for the following purposes, as stated in the formal contract.

Scope of Research

This research study is to:

1. Survey all school boards in Ontario
 - to determine procedures presently employed or in readiness for the early assessment and identification of children's learning abilities;
 - to determine what intervention programs are in operation or that the boards anticipate introducing to assist children identified as being in special need;
 - to obtain copies of identification and intervention materials from a representative sample of school boards.
2. Examine the research evidence pertaining to the efficacy of the early identification materials and procedures used in Ontario.
3. Using the results of the above two investigations, describe the present state of the art of early identification and intervention in the province of Ontario.
4. Compile a comprehensive list of the various early identification procedures most commonly used, with careful attention being given to a critical evaluation of the reliability and validity of these techniques and of their educational relevance.
5. Prepare a detailed description of the most typically used intervention

programs with a focus on rationales, components of the programs, procedures for implementation, and their effectiveness and utility.

6. Prepare a report for the Minister providing accurate statistics and data on the boards using early identification procedures and materials and their efficacy, and information on selection of ways to assist children.

PROCEDURE

Even the baldness of contract language cannot conceal the breadth and complexity of the survey required to provide a detailed and comprehensive picture of early identification practice in school boards in Ontario. However, the survey had to be completed in five months on a small budget, which imposed many practical limitations on the scope of the research. Two full-time staff conducted the bulk of the work, with some volunteer help from a small group of graduate students and the supervision of two faculty members. An initial questionnaire was sent to all elementary school boards; the information resulting from it provided a broad outline of early identification and intervention practice in the province. This was followed by a more detailed questionnaire sent to a sample of 27 boards of education, and by personal interviews conducted with representatives of these boards. Documentation was gathered from provincial sources, including school boards.

In parallel, through the relevant literature, surveys were carried out of practice, theory, and research in early identification and intervention work in the United States, the United Kingdom, and Canada outside Ontario. To ensure comprehensiveness, work emphasizing learning disabilities as well as learning abilities was investigated. All identification and intervention practice was examined using the following three-part distinction:

- rationale for a program, procedure, or technique;
- program and procedures, that is, the global system in operation, described in terms of its major structural components;
- technique, that is, the actual instrument or materials employed.

Although the study simply could not achieve the breadth and the level of detail thought to be desirable, the researchers consider the scope and depth of the work done to be sufficient for a balanced review. Within the necessary constraints of time and funding, selectivity among informational sources was essential although every attempt was made to

be comprehensive with regard to the Ontario material, it being the core of the study. Eventually, the following modes of data collection were chosen.

For Ontario

1. An initial questionnaire to each board of education on its existing early identification and intervention practice
2. A second, more detailed questionnaire to a sample of 27 boards of education, in preparation for an interview with a team member
3. General documentation: research studies and reports, board of education reports, and official statements
4. Informal discussion with school board personnel, researchers, Ministry of Education officials, and many others in the educational community

For Canada outside Ontario

General documentation: research studies and reports, provincial Ministry of Education official statements

For the United States and the United Kingdom

1. Research literature
2. General documentation: government (federal, state, national) reports and official statements

All of these sources were reviewed in relation to the more discursive literature contained in texts, overviews, review articles, and the like, the theoretical and analytical nature of which complemented the factual emphasis of the research- and survey-based approaches.

POSITION OF THE INVESTIGATORS

The study required the investigators to provide both factual information about, and interpretative comment on, current practice in Ontario boards of education regarding early identification of children's abilities. At both of these levels, the investigator's own conceptual framework was necessarily involved

- in shaping the questions to be addressed and the modes of addressing them;
- in analysing the assumptions of school boards' practice;

- in determining the investigators' perception of the "state of the art" in Ontario, with attendant recommendations regarding early identification and intervention programs.

It is important, therefore, for readers of this report to be aware of the position of the investigators.

The predominant orientation, both implicit and explicit, in current early identification practice and theory is a traditional special education one emphasizing deficit. It is a natural extension of the developing emphasis in the last quarter-century on providing for the educational needs of children who do not make "ordinary" progress through the "normal" curriculum in the "regular" school. The major assumptions of this orientation are, following Keogh and Becker (1973), that a condition exists to be identified; that the diagnosis carries a specific prescription for treatment; and that the sooner the latter is initiated, the greater is the likelihood of its success. Early identification of the child's condition and implementation of preventive treatment are seen not only as advantageous but critical.

Such a position, familiar and powerful though it may be in education, has long perturbed the authors, for reasons similar to those of writers such as Meier (1976) and Coles (1978). By contrast, two major assumptions characterize the present investigators' approach and, indeed, have determined to some extent their interest and involvement in the field of early identification and intervention. Though neither original nor earth-shattering, these assumptions are not mere "motherhood" statements; instead, they are active principles which have to be expressed in practice.

First, a child's learning in school is a complex, multifaceted process and results from a blending of such factors as the child's cognitive abilities, early experiences, and personality; the teaching ability of the teachers encountered; the classroom climate; and the child's interaction with parents, teachers, and the curriculum presented. Therefore, to assume that a child's actual or potential problem in learning exists only because something is wrong with the child is presumptuous and unrealistic. A learning deficit may be as much a function of the learning environment as of the child. To attempt to predict whether a learning difficulty will develop in the future, though laudable, is a much more complex venture than is commonly realized in educational practice (Keogh and Becker, 1973).

Second, and related to the above, the authors see individualization of the instruction of children in need as an extension of a broader principle, the individualization of teaching for all children. To focus exclusively on developing procedures for assessing, programming for, and teaching exceptional children is to adopt a clinical rather than an educational perspective.

The authors suggest a more comprehensive approach. Early identification work and attendant programming should not merely focus on current weaknesses in supposedly school-related areas in an attempt to predict (and thereby prevent) future problems. Instead, it should aim to discover a child's current learning abilities, his style of processing information, his characteristic ways of learning, the resources he brings to learning, and his ways of reacting to the instructional situation and to teachers. All children in an early school program, or about to enter one, should be assessed over a broad range of functioning, and their abilities, style, and resources described. Such descriptions, in practical, functional terms, can provide educationally relevant guidelines for teachers both for their general classroom programming and for teaching each child. Such an approach emphasizes a child's global functioning and specific aspects of it, which would necessarily take account of weaknesses and difficulties, and yet avoid the negativism of a deficit orientation. The term "early identification," with its now inevitable connotations of problem and deficit discovery, can be replaced by terms such as early developmental assessment or description, or developmental review, thus reducing the likelihood of negative labelling.

Two important corollaries of the above position are:

1. The heart of the matter of early identification is to look at the processes which a child uses to acquire knowledge as well as at the specific knowledge he has already acquired. For this we need measures of such knowledge and of the learning process itself, especially a child's characteristic strategies of learning and problem-solving.
2. Further, since the ultimate responsibility for planning and instruction rests with the classroom teacher, it is logical to utilize the skills of the teacher in all aspects and at all stages of the early assessment-instruction continuum. This can be accomplished through teacher development of observational skills, appropriate instructional programming, and ongoing evaluation, all centred in the child's own classroom.

2 The Initial Survey

INTRODUCTION

A questionnaire was sent out in early December 1978, to all boards in Ontario operating elementary schools, the aim of which was to obtain general information regarding the attitudes and practice of boards of education in the areas of early identification of children's learning abilities and related intervention. This questionnaire is contained in Appendix 1. The 99.2% return, 129 out of a possible 130 responses, provided the information contained in this chapter.*

To simplify presentation, this information is grouped thematically rather than by response to the successive questions of the questionnaire. The results of the initial survey are presented separately from those of the detailed questionnaire because they provide a general introduction to the whole study. Chapter 3 contains the results of interviews based on the detailed questionnaire.

* There were 129 boards of education to which questionnaires were sent. One of these boards had two sections (French and English), each of which returned a questionnaire (though giving opposite responses). A complete return of questionnaires would therefore have been 130 responses from 129 boards. As no response was received from one board, the final return was in fact 129 responses from 128 boards. Rather than take constant account of numerical discrepancy caused by the two responses by one board (treated as two boards), to simplify usage, the writers have adopted the convention of using the term "board" throughout instead of "response."

The number of boards ("responses") will normally be given in percentages, followed by the actual number of boards, e.g., 99.2% (128).

EARLY IDENTIFICATION PROGRAMS

Proportions of Boards with and without Programs

The boards were asked whether they had "a program for the early identification of children's learning abilities." Their responses fell into four categories.

The "Yes" Group. 67.4% (87) said that they had such a program established.

The "No-Yes" Group. 13.2% (17) said that they did not yet have such a program, but that they anticipated having one by September 1979.

The "No-No" Group. 13.2% (17) said that they did not have such a program, nor did they anticipate having one by September 1979.

The "No-Don't Know" Group. 6.2% (8) said that they did not have such a program, nor did they know whether they would have one by September 1979, although they were either considering creating one or thought they could have one ready by that date.

However, several important qualifications are required for this seemingly straightforward categorization.

- 78.6% (33) of all the boards in the three groups claiming not to have an early identification program in operation demonstrated, in their responses to the rest of the questionnaire, that in fact they were conducting activities of a sort closely similar to those described by the 87 boards in the "Yes" group. The 33 boards comprised all 17 of the "No-Yes" group, 9 of the "No-No" group, and 7 of the "No-Don't Know" group; not only did they represent a majority (78.6%) of the three "No" groups, but a substantial minority (25.6%) of the total of 129 boards.
- In addition, 9.5% of the "No" boards (4, comprising 3 of the "No-No" and 1 of the "No-Don't Know" group) were currently studying board policy regarding the implementation of early identification procedures.
- Only 11.9% of the "No" boards (5, all from the "No-No" group) made no further comment beyond their simple negative.

Although the amount and quality of detail provided and of activities described by the three "No" groups ranged from the piecemeal to the all-encompassing, 78.6% of these boards, on the basis of the information they provided, might equally reasonably have responded "Yes." All mentioned at least some of the following detail: that they were involved in programs at a pilot or planning stage, or offering partial coverage; that programs were optional, unformalized, or alternative; that they used Public Health

Unit screening, in many cases including the Denver Developmental Screening Test; that they already used, or were planning to implement, general and individual assessments; and that they already used, or planned to use, some combination of teacher observation, checklists, informal testing and, in a few cases, standardized testing to focus on characteristics which they were able to specify. This coverage was similar to that of the "Yes" boards, which also displayed wide divergence in amount and type of detail.

Given that the early identification procedures of many of the "No" boards appeared to be at a similar stage of development to those of many "Yes" boards, it might be argued that a de facto case existed for treating them statistically as falling within the latter category. Though the argument has some merit, it is less persuasive than the consideration that the boards chose to describe themselves as having or not having an early identification program. The boards' interpretation of their status thus dictated the interpretative frame of reference for the results of the questionnaire.

Reasons for Not Having an Early Identification Program

In the event that they did not have a program, the boards were asked their reasons under one or more of four categories, namely, fiscal, personnel, ethical, and other. The responses of the 32.6% (42) of the boards stating they did not have such programs fell into the following ten categories:

1. 45.2% of the boards (19) gave their reasons as "other," and indicated their specific reasons as follows:
 - 21.4% of all the "No" boards (9) stated that the work was either under study (8) or being piloted (1), but that the Public Health Unit was conducting early identification procedures, including the administration of the Denver Developmental Screening Test.
 - 9.5% (4) suggested they needed more time to develop procedures, but that the Public Health Unit was conducting early identification procedures, including the administration of the Denver Developmental Screening Test.
 - 7.1% (3) stated they already had other procedures in operation, which, though not formally designated as early identification procedures, had characteristics which would entitle them to that description.
 - 4.8% of the boards (2) indicated that they had other priorities in their system, but gave no further elaboration.

- 2.4% (1) stated that early identification procedures were already being conducted by the Public Health Unit, including the administration of the Denver Developmental Screening Test.
- 2. 11.9% (5) of the boards stated their reasons were to do with personnel, without elaborating further.
- 3. 7.1% (3) indicated their reasons were both fiscal and to do with personnel.
- 4. 7.1% (3) gave ethical reasons.
- 5. 4.8% (2) gave a mixture of ethical and personnel reasons.
- 6. 4.8% (2) gave a mixture of ethical and other reasons.
- 7. 2.4% (1) of the boards stated a mixture of fiscal, personnel, ethical, and other reasons. This board mentioned its use of the Public Health Unit's screening procedures, including the administration of the Denver Developmental Screening Test.
- 8. 2.4% (1) gave a mixture of fiscal, personnel, and ethical reasons.
- 9. 2.4% (1) gave fiscal reasons.
- 10. 11.9% (5) did not give any reasons.

Growth

Table 1 depicts, by type of board, the growth of early identification programs reported by the "Yes" group. The current proportion of boards with early identification programs, by type, is illustrated in Table 3.

Table 1/Growth of Early Identification Programs 1967-1978, by Type of Board

Type of Board	Year												No Date Given
	1967	'68	'69	'70	'71	'72	'73	'74	'75	'76	'77	'78	
Public School Board	2	1	2	6	5	1	3	3	6	5	8	10	3
Separate School Board	-	-	-	1	-	2	5	3	2	4	1	4	6
National Defence Board	-	-	-	-	-	-	-	2	1	1	-	-	-
Annual Totals	2	1	2	7	5	3	8	8	9	10	9	14	9
Running Totals	2	3	5	12	17	20	28	36	45	55	64	78	87

Table 2/ Early Identification Programs by Stage of Development (1978)

Type of Board	Program in Place	Program in Pilot Stage	No Program Reported	Status Unknown
Public School Board	54	1	21	-
Separate School Board	25	3	20	-
National Defence Board	4	-	1	-
Totals	83	4	42	1

Table 3/ Proportions of Boards, by Type, with Early Identification Programs (1978)

Type of Board	Total Number of Boards Surveyed	Proportion Boards with Program
Public School Board	76	72%
Separate School Board	49	57%
National Defence Board	5	80%

Timing

Table 4 indicates the times during the early school years when boards conducted their early identification procedures. The beginning of the school year refers to September and October, and the end to around May. The term "pre-school" was interpreted by boards as referring either to pre-junior kindergarten or pre-senior kindergarten, as some boards did not have the former in their systems.

Table 4/Time of Early Identification of Learning Abilities

No. of Boards	Junior Kindergarten		Senior Kindergarten		Pre-School		Grade 1
	Beg.	End	Beg.	End	Beg.	End	Beg.
	10	9	28	9	6	24	1

Characteristics Assessed

The two characteristics most commonly identified as being assessed through early identification procedures were language (both receptive and expressive) and general development. Least often identified were sensory abilities. Table 5 indicates the percentage of boards measuring each of the eleven characteristics presented to them for comment in the initial questionnaire.

Table 5/Characteristics Measured by Early Identification Procedures

Characteristics	% of Bds.	(No.)
Receptive Language	94.3	82
Expressive Language	90.3	79
General Development	88.5	77
Visual Perception	83.9	73
Auditory Perception	82.8	72
Fine Motor Development	80.5	70
Speech	79.3	69
Gross Motor Development Behaviour	75.9	66
Cognitive Functioning	74.7	65
Sensory Functioning	59.8	52

Types of Early Identification Procedures

The boards indicated whether their early identification procedures consisted of a general screening or individual assessment approach, or both. Their responses are summarized in Table 6.

Table 6/Types of Early Identification Procedures

Procedures	% of Bds.	(No.)
General Screening and Individual Assessment	52.9	46
General Screening Only	36.8	32
Individual Assessment Only	9.2	8
Unknown	1.2	1
	100.1*	87

*Occasionally, a percentage total of 99.9% or 100.1% occurs in the report because of rounding out error. These are indicated by an asterisk throughout.

Sources of Referral for Individual Assessments

The boards were asked to specify typical sources of referral where individual assessment of children was involved. Many boards gave several such sources. The responses are outlined in Table 7.

Table 7/ Sources of Referral for Individual Assessment

<u>Source</u>	<u>% of Boards</u>	<u>(No.)</u>
Teachers	54.0	47
Parents	42.5	37
Public Health Nurses	14.9	13
Physicians	8.1	7
Outside Agencies	6.9	6
Principals	4.6	4
Screening Results	3.5	3
Primary Consultants	3.5	3
Special Services Teachers	3.5	3
Psychologists	2.3	2
Hospital for Sick Children	1.2	1

Instruments and Techniques Used

The boards were asked to indicate whether they used teacher observation, informal tests or standardized tests, or some combination of these, in their early identification procedures. The responses covered many types of measures including tests, and misallocation of measures was frequent. Therefore the responses are reported using the more general term "measure" for non-standardized techniques. Where necessary, titles of measures are reallocated in accordance with traditional criteria. Table 8 reports the types, and combinations, of instruments and techniques used by the boards. Tables 9 and 10 list, respectively, the published and board-developed informal measures reported by the boards. Table 11 lists the boards using the Windsor Early Identification Kit, and Table 12, the boards using a modified version of it. Standardized tests reported by the boards are listed in Table 13.

Table 8/ Types and Combinations of Instruments or Techniques Used by Boards

<u>Types and Combinations</u>	<u>% of Bds.</u>	<u>(No.)</u>
Teacher observation, informal measures, and standardized tests	39.1	34
Teacher observation and informal measures	25.3	22
Teacher observation and standardized tests	10.3	9
Informal measures and standardized tests	9.2	8
Informal measures only	8.0	7
Teacher observation only	3.5	3
Standardized tests only	3.5	3
Unknown	1.1	1
	<u>100.0</u>	<u>87</u>

As shown in Table 8, 81.6% (71) of the boards included the use of informal measures, 78.2% (68) teacher observation, and 62.1% (54) standardized tests in their early identification procedures.

Table 9/ Informal Commercial Measures Used by Boards in Early Identification Procedures

<u>Title of Measure</u>	<u>No. of Bds.</u>
1. Slingerland Tests for Identifying Children with Specific Language Disability	3
2. Diagnostic Word Perception Skills	1
3. IOTA Word Test	1
4. Kinetic Family Drawings	1
5. Mann-Suiter Readiness Materials	1
6. Vision and Hearing Screening for Elementary Schools (Orinda Study)	1
7. Portage Guide to Early Education Checklist	1
8. Rosner Auditory Analytic Skills	1
9. Snellen Vision Chart	1
10. Psychomotor Developmental Checklist (taken from Voyer's text "L'enfant de deux à cinq ans")	1
11. Yellow Brick Road	1

Table 10/ Informal Board-Developed Measures Used by Boards in
Early Identification Procedures

Title of Measure

1. Brant B. of E. Early Identification Battery (have included parts of Windsor County RCSSB Screening Battery)
2. Carleton B of E Program Needs Checklist
3. Central Algoma B of E Identification Procedures (based upon Evaluation Guide by Dr. Chris Nash, OISE)
4. Etobicoke B of E (teacher designed procedures indicated but not specified)
5. East Parry Sound B of E Developmental Screening
6. Haldimand B of E (teacher-prepared procedures developed using the Lincoln B of E Battery as a model)
7. Halton B of E General Information Assessment
8. Hamilton B of E Learning Problems Checklist
9. Huron County B of E Identification Checklist
10. Lake Superior B of E Identification Assessment Procedures
11. Lambton County RCSSB Junior-Kindergarten Checklist
12. Lincoln County B of E Battery
13. City of London B of E (adoption of Ottawa B of E Behaviour Checklist)
14. Ottawa B of E Early Identification Inventory (draft form)
15. Peel B of E Early Identification Scales
16. Perth County B of E Early Identification Checklist
17. Peterborough County B of E Kindergarten Identification Scale
18. Simcoe County RCSSB Kindergarten Screening Test
19. Stormont, Dundas and Glengarry County B of E Readiness Checklist
20. Sudbury District RCSSB Test, "Enfants de quatre ans" (language evaluation)
21. Welland County RCSSB Reading Readiness Inventory
- *22. Wellington B of E Pre-Kindergarten Inventory
- *23. Wellington RCSSB Pre-Kindergarten Screening Test
- *24 Windsor B of E Early Identification Kit
25. Windsor RCSSB Screening Battery for Kindergarten Children
26. City of Toronto B of E Early Identification and Developmental Program

*While the questionnaire did not specifically ask for information relating to the compilation of normative data, these measures were reported as having normative data.

Table 11/ Boards Using the Windsor Early Identification Kit

Name of Board

1. Atikokan B of E
2. Cochrane-Iroquois Falls B of E
3. Dryden B of E
4. Dufferin B of E
5. East Parry Sound B of E
6. Espanola B of E
7. Hearst District RCSSB
8. Hornepayne B of E
9. Kapuskasing B of E
10. Kent County RCSSB
11. Kirkland Lake District RCSSB
12. Lambton County B of E
13. Lanark County B of E
14. North Shore B of E
15. Petawawa B of E (C.F.B)
16. Renfrew County B of E
17. Renfrew County RCSSB
18. Sault Ste. Marie B of E
19. Timiskaming District RCSSB
20. West Parry Sound B of E

Table 12/ Boards Using the Windsor Early Identification Kit with Modifications

1. Cochrane-Iroquois Falls District RCSSB
2. Durham B of E
3. Geraldton B of E
4. Muskoka B of E
5. Nipissing District RCSSB
6. Timiskaming B of E

Table 13/ Standardized Tests Used by Boards in Early Identification Procedures

<u>Title of Test</u>	<u>No. of Boards</u>
Denver Developmental Screening Test	15
Illinois Test of Psycholinguistic Abilities	10
Peabody Picture Vocabulary Test	10

Metropolitan Readiness Tests (from P. Level I & II)	8
Wechsler Intelligence Scale for Children - Revised	7
Stanford-Binet Intelligence Scale, Revised	6
Medvedeff Assessment System	5
Bender Visual Motor Gestalt Test	4
Frostig Developmental Test of Visual Perception	4
Wechsler Pre-School & Primary Scale of Intelligence	4
Beery Developmental Test of Visual-Motor Integration	3
Gates-MacGinitie Reading Tests: Readiness Skills K-1	3
Peabody Individual Achievement Test	3
Wepman Auditory Discrimination Test	3
Wide Range Achievement Test	3
Goldman-Fristoe-Woodcock Auditory Skills Test Battery	3
Circus Test Battery	2
Clymer-Barrett Pre-Reading Battery Form A	2
Boehm Test of Basic Concepts	2
Carrow Elicited Language Inventory	2
McCarthy Scales of Children's Abilities	2
OISE Picture Reasoning Test	2
Raven's - Progressive Matrices	2
ABC Inventory to Determine Kindergarten & School Readiness	1
Anton Brenner Developmental Test of School Readiness	1
Brigance Diagnostic Inventory of Basic Skills	1
Canadian Cognitive Abilities Test	1
Dominion Group Tests of Learning Capacity and Reading Readiness	1
Durrell-Sullivan Reading Capacity and Achievement Test	1
House-Tree-Person Projective Technique	1
Meeting Street School Screening Test	1
Monroe Sherman Group Diagnostic Reading Aptitude & Achievement Test	1
Myklebust Pupil Rating Scale	1
OISE Pre-reading Assessment Kit	1
Otis-Lennon Mental Ability Test (Form 1, Primary 1 and 2)	1
Purdue Perceptual Motor Survey	1
Pintner Cunningham Primary Test	1
Primary Mental Abilities K-1	1
Search and Teach	1
Slosson Intelligence Test for Children and Adults	1
Screening Test of Academic Readiness	1

Screening Test for the Assignment of Remedial Treatments	1
Test for Auditory Comprehension of Language	1
Vane Kindergarten Test	1
Vineland Social Maturity Scale	1
Watson Reading Readiness Test	1

Administration of Tests

Where testing, as distinct from general observation, was involved, many boards took a team approach with such combinations as Public Health Unit nurses administering the Denver Developmental Screening Test and teachers a prepared checklist, or teachers and a special education team administering various batteries of measures. Though these team arrangements varied greatly, the involvement of many different disciplines was widespread, as can be seen in Table 14.

Table 14/ Involvement in Testing, by Discipline

Discipline	% of Bds. Involved	(No.)
Teachers	75.9	66
Psychoeducational Consultants	19.5	17
Psychologists	18.4	16
Public Health Unit Nurses	14.9	13
Teacher-Diagnosticians	14.9	13
Psychometrists	5.8	5
Speech Correctionists	4.6	4
Primary Consultants	4.6	4
Health Personnel (unspecified)	4.6	4
Speech Pathologists	3.5	3
Principals	1.2	1
Optometrists	1.2	1
Psychiatrists	1.2	1
Paraprofessionals	1.2	1
Reading Assistants	1.2	1

Sex Ratios Reported in Early Identification Programs

The boards were asked to state what ratio of boys to girls emerged from their early identification program. Unfortunately, the question carried, though unintentionally, an implication of children emerging as learning disabled, which was objected to by many boards. As a result, the responses were incomplete and probably contained ambiguity, but they are listed in Table 15.

Table 15/ Sex Ratios Reported in Early Identification Programs

Ratio	% of Boards	(No.)
Boys > Girls	58.6	51
Boys < Girls ,	17.2	15
Boys = Girls	2.3	2
Unknown	21.8	19
Total	99.9*	87

*rounding off error

EARLY INTERVENTION PROGRAMS

Intervention Procedures Based on Results of Early Identification Procedures

The boards were asked to name the intervention procedures they used which were based on the results of their early identification procedures, according to whether they were:

- a published intervention program specifically associated with the identification measures used;
- a published intervention program independent of the identification measures;
- a general intervention program devised by the board or taken from another board;
- a teacher-devised program.

Many boards listed programs in more than one category, employing many permutations of intervention programs. Table 16 lists the types, and combinations of intervention procedures reported by the boards. Table 17 lists published intervention programs associated with their identification measure(s), reported by the boards. Table 18 lists published intervention programs independent of boards' identification measures. Table 19 lists the boards reporting that they had developed their own intervention programs, wholly or in part, and Table 20 lists the boards using the Windsor Identification materials as part of their intervention procedures.

Table 16/ Types and Combinations of Intervention Procedures Used by Boards

Types and Combinations	% of Bds.	(No.)
Teacher-devised program only	25.3	22
Teacher-devised program and board-devised program	17.2	15
Board-devised program only	17.2	15

Teacher-devised program and published program (associated)	4.6	4
Board-devised program and published program (associated) and published program (independent)	3.4	3
Teacher-devised program and board-devised program and published program (associated)	3.4	3
Published program (independent) only	3.4	3
Teacher-devised program and published program (associated)	3.4	3
Teacher-devised program and board-devised program and published program (associated) and published program (independent)	3.4	3
Teacher-devised program and published program (associated) and published program (independent)	2.3	2
Board-devised program and published program (associated)	2.3	2
Board-devised program and published program (independent)	2.3	2
Teacher-devised program and board-devised program and published program (independent)	1.2	1
Published program (associated) and published program (independent)	1.2	1
Published program (associated) only	1.2	1
Unspecified	8.1	7
Totals	99.9*	87

*rounding off error

As shown in the previous table, 60.9% of the boards included a teacher-devised program; however, only 25.3% (22) depended exclusively on them. A total of 50.6% (44) included a board-devised program, but many boards did not provide clear information about such programs, devised by them or other boards. A total of 21.8% (19) included a published intervention program specifically associated with the identification measures they used and 20.7% (18) an intervention program independent of an identification measure(s) used.

Table 17/ Published Intervention Programs Associated with Boards
Identification Measure(s)

Title of Program	No. of Boards
Frostig Program for the Development of Visual Perception	6
Medvedeff Perceptual Motor Series	6
Sequential Testing and Programming Language Development (STEPS)	3
Dubnoff School Program	2

Teach (from Search and Teach)	2
Beery Visual Motor Integration Manual	1
Boehm Concept Development (designated as both a diagnostic and teaching instrument)	1
Lucille Werner Early Prevention of School Failures	1
Metropolitan Readiness Test Skills Development Handbooks	1
Rosner Academic Program Suggestions (for children with auditory linguistic handicaps)	1
St. Louis Program (individualized approach to speech and reading readiness)	1
Yellow Brick Road Activities	1

Table 18/ Published Intervention Programs Independent of Boards' Identification Measure(s)

Title of Program	No. of Boards
Peabody Language Development Kit	4
Stott Teaching Materials (e.g., Flying Start)	4
Remediation of Learning Disabilities (Vallett)	3
Evaluation Guide (Dr. C. Nash, OISE)	2
Language Masters	2
A. R. Listening Tapes	1
Devereaux Motor Program	1
Developmental Learning Material (Concepts for Communication)	1
Dubard Method for Severe Language Disorders	1
Developing Understanding of Self and Others	1
Goal Language	1
Kephart Program (based on text "Slow Learners in the Classroom")	1
Mann-Suiter Program	1
Neurological Impress	1
Phonovisual Conceptual Skills	1
Ready Steps	1
Sullivan Reading Readiness Materials	1
Gateways to Good Reading	1
Parquetry Blocks	1
SRA Reading Labs	1

Table 19/ Boards Reporting Development of Own Intervention Programs

Brant County B of E: Intervention program offering recommendations to parents related to findings of pre-school screening

Bruce-Grey County RCSSB: Programs devised by board's speech pathologists in speech and hearing

Dufferin County B of E: Unspecified

East Parry Sound B of E: Unspecified

East York B of E: Unspecified

Essex County B of E: Unspecified

Etobicoke B of E: Unspecified

Frontenac County B of E: Multi Entry Project Materials

Halton B of E: Halton Early Identification Strategies: Observing, Planning and Evaluation Guide

Hamilton B of E: General Intervention Program

Hastings-Prince Edward County RCSSB: Program based on Waterloo County B of E Pre-Kindergarten Registration Program

Lakehead B of E: Program in Planning Stages

Lake Superior B of E: Unspecified

Leeds-Grenville County B of E: Unspecified

City of London B of E: Unspecified

Muskoka B of E: Unspecified

Norfolk B of E: Program involving Public Health Nurses who make recommendations to teachers about "high risk children"

Ottawa B of E: Unspecified

Oxford County RCSSB: Unspecified

Oxford County B of E: Individualized Program (no further details)

Peel B of E: Program Intervention Strategies developed by Board consultants

Perth County B of E: Unspecified

Peterborough County B of E: Peterborough Gross and Fine Motor Program

Prescott and Russell County RCSSB: Unspecified

Sault Ste. Marie B of E: Intervention Program based on Windsor PSB Listening with Meaning

Scarborough B of E: In planning stages

Stormont, Dundas and Glengarry County B of E: Reference made to series of techniques rather than fully developed program, e.g., groupings, different starting dates, etc.

Sudbury District RCSSB: Correction du langage

Timiskaming District RCSSB: Program based on total development of child, many activities in terms of physical development

Timmins B of E: Unspecified

Toronto B of E: The ABC Program
 Waterloo County B of E: Pre-Kindergarten Registration Program
 Wellington County B of E: Happygarten Kids Program
 Wellington County RCSSB: Unspecified
 Windsor B of E: Windsor Early Identification Materials
 Windsor RCSSB: Not specific
 York County B of E: Not specific

Table 20/ Boards Using the Windsor Early Identification Kit Materials
 in Intervention Procedures

-
1. Atikokan B of E
 2. Cochrane-Iroquois Falls District RCSSB
 3. Hornepayne B of E
 4. Kapuskasing B of E
 5. Kent County B of E
 6. North of Superior District RCSSB
 7. Renfrew County RCSSB
-

Location(s) of Intervention Programs

The boards were asked to state whether their intervention programs took place in regular classrooms, special classes, resource rooms, or any combination of these. The results are given in Table 21.

Table 21/ Location(s) of Intervention Programs

Location(s)	% of Bds.	(No.)
Regular Class only	37.9	33
Regular Class, Special Class and Resource Room	21.8	19
Regular Class and Resource Room	12.6	11
Regular Class and Special Class	11.5	10
Resource Room only	3.5	3
Special Class and Resource Room	1.2	1
Special Class only	1.2	1
Unknown	10.3	9
Totals	100.0	87

3 The Selected Sample

INTRODUCTION

The Sample

The initial survey reported in the previous chapter was intended to provide a global picture of early identification work being carried out by Ontario school boards. In order to provide a more developed analysis, a second, and detailed, questionnaire was sent to a sample of 27 boards (20.9% of the 129 responding boards). Personnel nominated by the boards completed these (or made notes on the questions) and gave an interview to a team member in which the questions were explored. This second questionnaire is contained in Appendix 2. The research team considered that they gained, by this means, a reasonably broad and balanced perspective on work in, attitudes to, and concerns about, early identification in Ontario boards of education. Personnel interviewed were most cooperative; they made many helpful suggestions regarding areas of discussion and analysis, and possible recommendations; and they were informative, often vividly so, about the activities and the mood of school boards in early identification work.

The sample of 27 boards comprised two groups:

1. A representative sample of all boards operating elementary schools stratified according to size (large, medium, and small) and type (public or separate), within a framework of Ontario regions (Central, East, West, Northwest, Northeast, and Midnorth). These are detailed in Table 22.
2. To these 21 boards were added 6 more, representing boards which had been prominently involved in early identification work, often developing their own instruments. It was considered important to add to the sample of 21 boards, reflecting the typical "state of

the art" of early identification work, a group likely to reflect the most developed, experienced, and perhaps influential practice. In selecting this group, the criteria applied to select the larger group were not followed, but the categories into which the six boards fell are given in brackets in Table 22.

Table 22/ Boards Selected for Detailed Questionnaire by Size, Type, and Region

Region	Size and Type						Total
	Large		Medium		Small		
	Public	Separate	Public	Separate	Public	Separate	
Central	2(2)	1	2	2	-	-	7(2)
East	1(1)	-	1	1	-	-	1(1)
West	1(2)	-(1)	1	2	-	-	4(3)
Northwest	1	-	-	-	-	1	2
Northeast	-	-	1	-	1	1	3
Midnorth	-	-	1	-	1	-	2
	5(5)	1(1)	6	5	2	2	19(6)

Categorization of Information

The questions presented to the boards were largely open-ended; where alternative choices were offered, they were often not exclusive of each other. Relative emphases among, rather than choices between, positions were sought. As a result, questions often did not distribute the 27 boards in the selected sample into discrete categories.

Conceptual Framework

The issues identified in the initial survey were developed in greater breadth in the detailed questionnaire, and a much more intensive and extensive analysis of their practice and positions was asked of the boards. The selection of the issues to be addressed in the questionnaire and interviews was guided by the following conceptual framework, within the generic and related notions of early identification of children's abilities, and early intervention.

Rationale: goals, focus

Nature: selection, types, implementation, results

Maintenance:

a) practical: costs, personnel, time

b) substantive: in-service training, evaluation

Implications: in-service training, parent education, special education placement, general curriculum

This framework also guided, in a general fashion, the structure of this chapter, and of the discussions of the "state of the art" in Ontario (chapter 4), and of work in other countries (chapter 5).

EARLY IDENTIFICATION OF CHILDREN'S LEARNING ABILITIES

Goals

The goals discussed by the 27 boards of education in the selected sample fell into three major and three minor categories. Board personnel generally identified several goals. These were expressed in varied ways but especially in the major goals and so the illustrations following are for the latter, in language as close to the original as possible. In the discussions with board personnel, the distinction suggested to them in the detailed questionnaire between long- and short-term goals generally became blurred so that the goals as expressed in the illustrations were not specified as long- or short-term, except in cases where the emphasis was judged to be consistent across many boards.

Major Goals

Goals with Major Emphasis upon the Identification of, and Programming for, "High Risk" Children. At least one goal focussing on the identification of potentially "high-risk" children was stated by 81.5% (22) of the boards; in the case of 6 of these boards, all stated goals had this focus. For 8 boards it was both a long-term and short-term goal; for 6 boards it was a long-term, and for 2 boards a short-term, goal only. All of the boards stating this goal linked the identification of potentially "at risk" children to the implementation of preventive or compensatory programming. In the following list, this link is explicit in examples (a) to (d), and implicit in examples (e) to (h).

- (a) to identify potentially "at risk" children in order to modify their initial program (long-term)
- (b) to implement preventive teaching
- (c) to identify children unlikely to achieve mastery in the core curriculum and provide individual programming for them
- (d) to develop appropriate teaching strategies and curriculum components for students with developmental learning difficulties
- (e) to reduce the number of students who might need remedial or special education help (by implication, during their later school career)

- (f) to shift from remediation to prevention in order to decrease the number of children in special education and prevent behavioural problems associated with lowered self-esteem and failure
- (g) to help teachers identify "high risk" children and intervene *before* they have serious academic difficulties (long-term)
- (h) to identify children for future placement decisions, e.g., retention in kindergarten, or for special education referrals, or for inclusion in pre-school compensatory programs, or for assistance outside a regular classroom

The emphasis on identification of, and associated programming for, "at risk" children was related to the need for a shift in emphasis from remediation in later years to an early preventive approach, in order to avoid the complicating factors of lowered self-esteem, frustration, and failure. Ten boards expressed their dissatisfaction with the practice of identifying children with learning difficulties too late - that is, in grade 3 or beyond - when the problems had become entrenched and were much harder to remediate.

Goals with Major Emphasis on the Identification of Abilities of All Children in a Class. The most often expressed statement of this type of goal, given by 8 of the boards, as "to program to meet every child's learning needs." In all, 77.8% (21) focussed on this theme. For 3 boards all stated goals had this focus; 6 boards included it as both a long- and short-term goal; 7 boards described it as a long-term, and 5 as a short-term goal. This notion of early identification's function being primarily "to meet every child's learning needs" is demonstrated in the following examples of stated goals:

- to provide a data bank of information for teachers to plan appropriate programs
- to help teachers become aware of, and prepare for, the needs of individual children
- to match program to child
- to provide teachers with information about children's home situations and past development as a basis for appropriate kindergarten activities

Goals with an Emphasis on Communication between School and Home or Community. This goal was given priority by 37% (10) of the boards. Four boards described this type of goal as being both long- and short-term;

3 described it as short-term, and 3 as long-term. Illustrations are:

- to develop the two-way sharing of information between school and home
- to encourage the involvement of parents in the learning process of their own children
- to develop communication between home, school, and community agencies involved in the welfare of children

Minor Goals

The most obvious feature of these minor goals, apart from their being presented by fewer boards, was that they were much narrower in scope than the major goals.

Goals Emphasizing In-service Training for Teachers. Either an increase in in-service training for teachers, or the identification of teachers' in-service needs, in the field of early identification was emphasized by 14.8% (4) of boards.

Goals Emphasizing Identification of Bright Children. The identification of children with high potential was emphasized by 11.1% (3) of the boards; 2 of these specified, as part of that goal, follow-up programming for children identified as bright.

Goals Emphasizing Optimal Use of Special Education Resources. The development of mechanisms for making optimal use of diminishing special education resources, including a change from special education placement to retention in a regular classroom, was specified by 7.4% (2) of the boards as a long-term goal.

Selection of Early Identification Procedures

Criteria for Selection

The term "procedures" was left open to individual interpretation by the boards in responding to both the initial and the more detailed questionnaires. Consequent discussion in the interviews revealed a wide range of perceptions of what constituted procedures. These ranged from specific tests, such as the Denver Developmental Screening Test and techniques such as teacher observation, to an amalgam of organizational arrangements. The latter typically constituted timing, personnel, measures and modes of getting information about children, including tests,

and translation of information into programming. Only one board was unclear about the criteria it considered appropriate for selecting identification procedures. All the others presented criteria, usually several; these are listed below, with numbers of boards indicating them in brackets.

Procedures had

- to provide a developmental profile in the social-emotional, perceptual, motor, conceptual, and language areas (17).
- to be immediately applicable to programming (10).
- to be teacher-centred (8).
- to be of moderate cost in time, money, and personnel to administer the procedures (8).
- to be consistent with the system's kindergarten philosophy and program (7).
- to predict future learning success, usually specified as in grade 1 (6).
- to be supported in the early identification research literature (6).
- to include parent involvement in the early identification process (6).
- to have adequate reliability and validity (5).
- to involve the Ministry of Education, preferably in an advisory capacity (5).
- to involve informed, rather than standardized, tests (2).
- to involve individual, rather than group, tests (2).
- to be ongoing rather than once-for-all (2).
- to involve school-community cooperation (2).
- to involve a multidisciplinary approach (1).
- to be able to identify "high risk" children (1).

Mode of Selection

While aiming to obtain a general view, in the boards' own terms, of how early identification procedures were selected, the interviews paid particular attention to two aspects of the mode of selection, namely, the roles of selection teams and of teachers.

Role of Selection Teams. (Selection of Procedures)

- (a) To select their procedures, 44.4% (12) of the boards had planning committees which included kindergarten teachers. In addition to teachers, these committees comprised a combination of primary and special service personnel - e.g., primary consultants, special

service consultants, psychoeducational consultants, special education resource teachers, psychologists, speech pathologists and, in some cases, principals, senior administrators (superintendent, supervisor, or director), and consultants from outside the school system, such as OISE and/or Ministry of Education personnel.

- (b) In the case of 22.2% (6) of the boards, the initial selection of procedures was made by a senior administrator. Three of these boards selected the Medvedeff program, 2 chose the Windsor Early Identification Kit, while one was still at a planning stage and considering the Windsor material for some of its identification procedures. The Medvedeff program was selected in two instances by directors of education and in the third instance by a superintendent of curriculum and programming. The Windsor program was selected by a coordinator of special services for one board and, for the other, by the administration as a result of asking Ministry of Education advice. Three of these boards mentioned that kindergarten teachers were asked informally to give feedback on the procedures after the initial selection was made. In addition, the primary consultant making the initial selection for the planning-stage board emphasized that kindergarten teachers would expect, and would be expected, to play an active part in the final planning, evaluation, and modification of procedures.
- (c) In 14.8% (4) of the boards, planning committees did not formally include teachers, but asked teachers for comments and suggestions once initial decisions about procedures had been made. These committees comprised:
- a psychometrist, trustee, and primary consultant, who met initially, then organized "brainstorming" sessions with parents, trustees, and principals to discuss issues and procedures (1);
 - special service personnel and primary consultants, who selected possible tests for each area of interest and then received comment and suggestions from the principal and teacher(s) of each school on which tests would be most relevant for their school population (2);
 - primary and special services personnel, who selected the procedures and then asked teachers for suggestions on carrying out the program, for example, the timing of the procedures (1).
- (d) In 14.8% (4) of the boards, planning committees had no classroom

teacher representation. These committees comprised:

- psychological consultant and chief of educational research;
- primary consultant and supervisor of special services;
- support service and administrative personnel;
- primary consultant, special education consultant, and chief psychologist.

- (e) In 3.7% (1) of the boards, a group of teacher-diagnosticians initiated the search for procedures by examining research on existing programs. They then asked principals and kindergarten teachers throughout the system for suggestions about areas of development that should be assessed.

Role of Teachers. (Selection of Procedures) Although the part played by teachers in selecting procedures is in some measure outlined in the previous section, a separate discussion of their role is warranted by the importance given to it by the boards in interview and questionnaires. Four categories of participation emerged.

1. In 29.6% (8) of the boards, teachers were not involved in the initial selection but had opportunities for comment and suggestion once the selection was made, at the early discussion or pilot stages, chiefly through workshops.
2. In 40.7% (11) of the boards where procedures were currently being implemented teachers were part of a selection committee, dealing with some or all aspects of the procedures.
3. In 14.8% (4) of the boards which were planning or developing procedures but had not yet implemented them, teachers were involved in that development as members of a planning committee.
4. In 14.8% (4) teachers were not at all involved in the selection of procedures, nor in the provision of comment or suggestions to those who did make the selection

Types of Identification Procedures and Characteristics Assessed
Procedures Implemented

Public Health Unit Contribution. Public Health Units were described as collecting information on every child's health, vision, and hearing in all school boards. In addition, 8 boards indicated that the Denver Developmental Screening Test was administered by their Public Health Unit. In the other boards, no further comment was offered in this regard. Such information appeared usually to be collected at the spring

pre-kindergarten registration when parent and child attended the school, often by appointment, for a series of registration procedures. Only 4 boards indicated that their health, vision, and hearing information was currently collected early in September.

There was variability in the degree to which the Public Health Unit information was shared with the school boards. A number of boards were trying to improve communication with their local Public Health Unit about sharing pre-kindergarten information. Where other boards seemed satisfied with the timing and content of the information from their Public Health Unit, they often remarked that both groups had worked hard to achieve this result.

School Procedures. These were as follows:

(a) Boards with Limited or Partially Implemented Procedures.

There were 51.9% (14) of the boards in the process of developing early identification procedures by planning, piloting, or partial implementation. Their procedures took many forms. Thus, 5 boards still used only the Public Health Unit screening information, but were in the process of planning additional procedures. One board was actually in the process of radically revising its procedures; 7 boards were currently piloting additional procedures; and 1 board had screening procedures available but not yet mandatory, though it was unclear to what degree these procedures were actually in use.

Of these 14 boards, 5 were planning to use, or were already piloting, the Windsor Early Identification Kit, some were making modifications to it, and 9 other boards were planning or piloting a variety of other procedures. Details of the procedures involved with both of these groups are contained in Appendix 3, but it is useful to summarize at this point the characteristics common to the planning or piloting procedures. All aimed to derive a developmental profile on each child in the areas of socio-emotional, cognitive, motor, perceptual, and language development. Six of the boards had devised or were in the process of developing their own checklist or inventory for this purpose. All emphasized their intention to have an ongoing classroom observation format rather than just a single assessment. All intended to have a teacher-centred program, that is, implemented by the teacher and for immediate use by the teacher for programming and reporting to parents.

(b) Boards with More Developed Procedures.

The 48.1% (13) of the boards which had fully implemented their procedures beyond the Public Health Unit contribution showed wide variations in the procedures used and their timing. However, there was considerable consistency regarding the areas of development assessed. All 13 boards obtained information on motor, sensory, perceptual, language, and cognitive development, the latter often including concepts of number and colour. All but 2 boards already obtained information on socio-emotional development and one of those two was looking for an instrument to assess this area. Four boards, including 3 using the Medvedeff program, indicated a definite emphasis on obtaining information on perceptual-motor development.

To assess the above areas, several different approaches were used:

- 4 boards developed their own teacher-observation checklist or inventory;
- 3 boards used the Medvedeff inventories;
- 3 boards used informal teacher observation, together with combinations of standardized and informal tests (in 2 of these boards the tests were administered only to children nominated by the teacher, and in the other board to all of the children);
- 2 boards used the complete Windsor Early Identification Kit;
- 1 board used Windsor items to assess expressive language and auditory perception, together with standardized instruments to measure the other areas of development.

The timing by these 13 boards of their early identification procedures was as follows: 5 boards implemented all their procedures during the spring preceding kindergarten admission; in 5 boards assessment occurred at some point during the kindergarten year; in 2 boards the process was an ongoing one throughout the kindergarten year; 1 board implemented some procedures at pre-junior kindergarten and the rest at the beginning of grade 1. The details of these timing arrangements are given in Appendix 4.

Implementation of Early Identification Procedures.

The people described by boards as being involved in the implementation of early identification procedures fall into three groups: teachers, other professionals, and parents. However, the role of teachers in this process

was more clearly defined than that of the other groups.

Role of Teachers. Among the boards:

- 48.2% (13) stated that teachers were the key personnel in the early identification process;
- 25.9% (7) described classroom teachers as the only persons actually involved or, in the case of boards at the planning stage, the only ones who would be involved;
- 14.8% (4) described classroom teachers as the main persons involved in the classroom observation part of the process;
- 7.4% (2) stated that classroom teachers shared the implementation of procedures with a teacher-diagnostician or other professional;
- 3.7% (1) left the implementation to the early identification program teacher.

Role of Other Professionals. All the boards made use of professionals other than teachers, as follows:

- 55.6% (15) of the boards used Board of Education personnel, mainly speech therapists, psychometrists, and curriculum or special education consultants;
- 63% (17) used Public Health Unit personnel or other medical and social welfare agencies;
- 18.5% (5) of the boards involved school personnel other than kindergarten or classroom teachers, such as principals, resource teachers, and school secretaries;
- 3.7% (1) involved Ministry and OISE personnel.

One qualification was made regarding the above categorization, namely, 4 boards used other professionals only under one or more of the following conditions:

- at a second level of individual assessment
- when referrals were made
- with atypical students on request
- with children identified by teachers as unlikely to achieve mastery in grade 1 reading and mathematics

A variety of roles was indicated for other professionals, and typically more than one within each board. The roles most often identified were: to provide additional information (e.g., specialized, diagnostic) as stated by 33.3% (9) of the boards; and to coordinate the early identification program, as stated by 14.8% (4) of the boards. Other

roles stated were: to welcome parents and explain the rationale for the program; to interview parents; to provide advice and support on request; and to carry out testing.

Role of Parents. Among the boards:

- 81.5% (22) stated that they involved parents in the identification process by requesting them to provide background information, especially through health and social histories; however, two of these boards involved the parents only at the request of the latter. Major emphases were:
 - interviewing or case conferencing with parents to achieve a mutual exchange of information between home and school (8);
 - the supportive role played by parents during registration and identification procedures, in helping children adjust to the school environment, in such terms as, "They are partners in the program," and "They provide the link between home and school" (5);
- 14.8% (4) of the boards did not as yet have any formal procedures for involving parents.

Release of Information

The same three groups identified by boards as centrally involved in the administration of the early identification procedures were also identified as recipients of the information resulting from those procedures - teachers, other professionals, and parents.

Teachers. All boards indicated that kindergarten teachers received the results.

Other Professionals. Among the boards:

- 55.6% (15) released information to other boards of education personnel such as special education and student services personnel, speech therapists, curriculum consultants, social workers, psychometrists, psychologists, and superintendents;
- 33.3% (9) released results to other professionals only under one or more of the following conditions:
 - when additional education psychological services were required and then only with parental consent or request (7 boards)
 - only to medical practitioners for particular children (2 boards)

- 29.6% (8) shared the results with Public Health Unit personnel;
- 14.8% (4) released to family physicians or other medical personnel;
- and 22.2% (6) released results to "outside" professionals.

In the case of these boards, it was unclear whether the release of information occurred routinely or only when a child was referred for a specific purpose.

Parents. Among the boards:

- 85.2% (23) released information routinely to parents, some using a formal interview procedure, others being more informal in their reporting procedures;
- 7.4% (2) discussed results only with the parents of children about whom there was some concern and a wish for more information through further assessment;
- 7.4% (2) stated that parents had as yet no access to the results.

Results of Early Identification Procedures.

(a) Referrals.

The boards were asked to state whether the results of the early identification procedures typically led to referrals.

1. 63.3% (17) of the boards responded "Yes," with the following qualifications:
 - 44.4% (12) of the boards (4 at a planning or piloting stage) said that referrals were or would be typical;
 - 11.1% (3) said that referrals were or would be typical, but would not constitute an immediate follow-up of initial identification; rather, they would occur only after the teacher had worked with a child for a period, or the child had completed kindergarten, or only late in grade 1 or even beyond.
2. 40.7% (11) of the boards responded "No," with the following qualifications:
 - 37% (10) of the boards stated that referrals were not typical, but would be possible if more information on a child were required;
 - 3.7% (1) stated that it was rare for referrals to be made as their emphasis was on the teacher's dealing with problems identified in the children.

The purpose for referrals most often mentioned was to obtain further information from detailed or diagnostic individual assessment. Programming advice and placement decisions were also indicated as reasons for referral.

Referrals in most boards were or would be made either within the system, to special services or consultative personnel, or to specialists at outside agencies such as local, social, or medical centres, or to family physicians, depending upon the needs of the child and availability of resources within a school system.

(b) Placement

The boards were asked if their early identification procedures typically led to placement decisions.

1. 100% (27) of the boards took a position against placement outside regular classes being typically carried out in the kindergarten years. Qualifications to this position were expressed by some boards:
 - 37% (10) of the boards indicated that only in really exceptional cases, which could not be accommodated within the regular school system (e.g., trainable retarded, severely physically handicapped, deaf, or autistic children) would consideration be given to placement outside the regular kindergarten program;
 - 18.5% (5) of the boards suggested that, even in the case of very severely handicapped children, as described above, an attempt would be made to keep them in kindergarten, using support services such as assistance from teacher aides, if necessary;
 - 3.7% (1) stated that kindergarten children could have help on a withdrawal basis either at one of its learning centres, or more usually, within the child's own school.
2. 44.4% (12) of the boards indicated that decisions would be made at the end of kindergarten regarding grade 1 placement. It was generally implied that such decisions would be made on the basis of early identification results and an individual assessment, not the former alone. The following options were most often described for children "at risk" or with difficulties:
 - returning children to kindergarten for an extra year;
 - placing children for half the year in kindergarten and the other half in grade 1;
 - advancing children into grade 1 with their peers, but retaining a kindergarten-type program, or attempting a grade 1 program with support services.
3. Special education placement was not often mentioned as an option. Thus,
 - 7.4% (2) of the boards said it could be considered after completion

of kindergarten. One of these boards specifically mentioned referral of trainable retarded or severely visually or hearing impaired children to special schools, and a non-categorized special education room for children requiring special programs, but to be integrated with regular programs as much as possible;

- 7.4% (2) would not consider special education placement until the end of grade 1;

- 3.7% (1) would not make decisions regarding special education placement until the end of grade 2 or beyond.

(c) General Curricular Change

The boards were asked whether the results of early identification procedures typically led to general curricular change.

1. 59.3% (16) of the boards declared some already existing influence on their general programming as a result of implementing identification procedures. This influence took a number of different forms, which are described below in summary and given in detail in Appendix 5.

- 18.5% (5) of the boards stated they had incorporated into the kindergarten curriculum items or areas that had been part of the identification measures, or new emphases deriving from them;

- 11.1% (3) of the boards gave general affirmative statements in reply to this question, without further details;

- 11.1% (3) of the boards stated they had a formalized procedure for using screening results as a guide to planning programs;

- 11.1% (3) of the boards stated that their procedures did not lend themselves to distinctions being made between general curriculum decisions and intervention programming for specific children, because their program was based upon individual needs and abilities and the results of their identification procedures were typically used to plan a specific program for each child;

- 7.4% (2) of the boards indicated that kindergarten teachers had tended to teach to areas of the screening test which showed weakness for some children and not teach to areas of strength.

2. 40.7% (11) of the boards indicated that they were only at the planning or piloting stage. These boards responded in detail as follows:

- 18.5% (5) stated that it was too early to be definite on the topic, but that they anticipated such general curricular change decisions in the future as a result of their identification procedures;

- 11.1% (3) of the boards indicated simply that there was no curricular change able to be documented;
- 3.7% (1) had under consideration a system-wide curriculum change, that is, implementing a mastery learning strategy for teaching reading, to begin at the kindergarten level. This was currently being developed by teachers and consultants;
- 3.7% (1) stated that, although no curricular change could be formally ascribed to early identification procedures, nevertheless there seemed to be a general sensitization on the part of the teachers as a result of the procedures;
- 3.7% (1) stated its special education department was trying to recommend suitable goals and program components for teachers in relation to identification procedures.

(d) Intervention for Individual Children

The boards were asked whether the results of their early identification procedures typically led to intervention for particular children. Their responses fell into several categories which are given in summary below, and in detail in Appendix 6.

1. 29.7% (8) of the boards, all at the planning or piloting stage of early identification procedures, stated that they had no formalized, system-wide intervention procedures. Whether intervention took place following identification procedures depended upon the ingenuity and experience of individual teachers.
2. 22.2% (6) of the boards indicated that, while their implementation of individual intervention procedures was mainly the responsibility of classroom teachers, there was support available for them.
3. 18.5% (5) of the boards described formalized procedures for obtaining support for classroom teachers in implementing and monitoring intervention procedures.
4. 14.8% (4) indicated a system-wide use of published intervention materials.
5. 7.4% (2) of the boards took the position that intervention to help a particular child was the same for them as general curricular change, since the thrust of their programs was to fit the curriculum to the child and not the child to the curriculum.
6. 3.7% (1) involved parents in intervention.
7. 3.7% (1) offered a pre-school summer program for "at risk" children, with other options available

EARLY INTERVENTION PROGRAMS

The term "intervention" was not specified by the investigators, who wished boards to respond as freely and fully as possible, using their own frame of reference. Though this led to a rich outpouring of ideas, it also made it difficult to categorize replies or relate one board's discussion of intervention procedures to another. As a result, the reporting of the findings on the boards' position about intervention uses a qualitative approach more than the previous section, attempting to capture the general sense of the boards' attitude through examples and qualitative summaries.

Selection of Intervention Procedures

The boards were asked to state the criteria they use for selecting intervention procedures, both in general and for a particular child. Of the two groupings which emerged, one consisted of only 3 boards, all using the Medvedeff System. The other 24 boards, accounting for 88.9% of the selected sample, demonstrated the following characteristics:

- they seemed disinclined, often strongly so, to use "packaged" or commercially produced intervention procedures;
- they saw intervention primarily as modification of the regular program to fit the needs of individual children, to be implemented by classroom teachers, as far as possible;
- they wanted intervention procedures to be consistent with the philosophy and practice of current kindergarten programs, emphasizing ongoing monitoring of children's progress and an individualized programming approach;
- they wanted programming based on ongoing assessment through classroom observation, and not primarily on a one-time assessment.

Within this major grouping of 24 boards, there were two subgroups:

1. 40.7% (11) were still at a planning or piloting stage regarding intervention procedures, including one board which was radically revising its whole approach to identification and intervention.
2. 48.2% (13) indicated a variety of procedures, often highlighting a team or conference approach to planning intervention for individual children. There was also a general indication or implication that information gained from early educational assessment was only part of the grounds for a decision to intervene.

To illustrate the variety of approaches used by these 13 boards, their positions are briefly outlined in Appendix 7.

Types of Intervention Programs

Implementation of Programs

As with the identification procedures, the boards described several types of people as being involved in the implementation of intervention procedures, and these again fell into the three categories of classroom teachers, other professionals, and parents.

Role of Teachers. Teachers worked in four basic ways in the implementation of intervention procedures:

- In 48.2% (13) of the boards teachers were the primary implementors of the intervention programs; their role included planning and monitoring, and they had advice and assistance available (e.g., consultants and resource teachers).
- In 37% (10) of the boards teachers functioned as in the previous category, but the planning component of the intervention programs was the responsibility of a team, of which a teacher was a member.
- 11.1% (3) were at the planning stage of intervention programs, but anticipated that the key persons in the implementation of such programs would be teachers.
- In 3.7% (1) the classroom teachers were involved in planning and monitoring individual intervention programs, but not necessarily in carrying out all of the program.

Role of Other Professionals. Because of the boards' differing interpretations of the term "intervention," there was overlapping between categories of professionals other than teachers involved in intervention programs. In 77.8% (21) of the boards, other professionals were routinely involved in their intervention programs. Of the remaining 22.2% (6), 5 had no other professionals involved in their intervention program, and 1 board said that their use was optional. Four main categories emerged:

1. 70.4% (19) of the boards employed the services of board of education consultative and support personnel, mainly speech specialists, special education consultants, curriculum consultants, and psychometrists.
2. 22.2% (6) used Public Health Unit personnel.
3. 18.5% (5) used various medical or social welfare personnel, typically involved to assist schools and parents regarding atypical children, upon referral by schools or request from parents.

4. 7.4% (2) reported using school personnel, chiefly resource teachers. The roles of these other professionals included advising about program modifications, suggesting programming ideas, giving direct assistance to children when necessary, and monitoring individual intervention programs.

Role of Parents. Again, the categories of parental role overlapped considerably. The following seven basic areas emerged:

1. In 59.3% (16) of the boards parents might be asked to reinforce some aspects of the program in the home. Qualifications such as "may" or "when it seems appropriate" occurred in half of these boards. Examples of boards' comments were:
"Provide assistance in setting up and implementing intervention strategies;" "Follow suggestions made at screening;" "Parents are encouraged to work on some aspects of the intervention program with their child at home to supplement school activities (and are) provided with a booklet of appropriate activities to do at home;" "Send some suggestions home, if it seems appropriate - around the house activities, e.g., noting colours when sorting laundry."
2. In 22.2% (6) parents were kept informed about the program to be instituted as a result of early identification procedures and might be given suggestions for helping their child. Some board comments were:
"Parents' permission with regard to intervention is requested and they are kept informed of actions taken, reasons and results;"
"Parents are made aware of a child's weaknesses and strengths (and are) given home suggestions with the request for their assistance and support;" "Intervention program is explained to parents. If they have a role to play, it is discussed with them."
3. 22.2% (6) maintained a general information-sharing contact between home and school. For example, "Ongoing dialogue with teacher about progress and problems;" "Parents give support for child based on shared assessments."
4. 11.1% (3) of the boards indicated that parents were involved as volunteers.
5. 11.1% (3) stated they had as yet no formalized role for parents specifically related to early identification or intervention procedures, although they did have the usual type of parent-teacher communication.

6. In 7.4% (2) of the boards parents were requested to seek help from outside agencies for further assessment.
7. In 3.7% (1) there was no role for parents as yet.

Support for Teachers. The boards were asked what types of support were available to teachers in early intervention programs. Again, the categories that emerged tended to overlap, as shown in Table 23.

Table 23/ Support for Teachers in Early Intervention Programs

Available Support	No. of Bds.	Source	No. of Bds.
Advice	20	Primary Consultants	17
		School-based Resource Teachers	16
		Psychoeducational Consultants	4
		Speech Therapists	4
		Principals	2
Materials	20	Public Health Unit Nurse	1
Teacher Aides*	11		
Parent Volunteers	10		
High School Students	1		
None, because board at planning stage	3		

*One board had placed teacher aides in all kindergarten classrooms.

Timing of Intervention Programs

The boards were asked whether, once a child was declared to need an intervention program, intervention (1) began immediately or after a period of observation; (2) was short- or long-term.

Immediacy. Responses fell into the following categories:

- 59.3% (16) of the boards stated that the timing of an intervention program would depend on the nature of the problem. Some variants on the theme were:

- Six boards pointed out that when a need was obvious, intervention began at once, but that when in doubt or incomplete information existed a period of observation or non-interference followed.
- One board said that suggestions for practical activities were made to parents immediately, but that the teacher modified the program for that child following a further period of observation.

- In one board, teachers were able to make immediate program changes but further decisions came only after a period of observation.
- 25.9% (7) stated that they launched an intervention program immediately, or as soon as possible. Most of these boards emphasized that the program was carried out in conjunction with continuing observation or ongoing assessment, and that the program depended on the nature of the problem.
- 7.4% (2) tended to be cautious about intervening too quickly, preferring to give a child time to become accustomed to kindergarten. Exceptions to the case were children with visual, auditory, or physical disabilities.
- 7.4% (2) did not discuss this issue, stating that it was not yet applicable to them.

Duration. The general response to the question of duration was again that it depended on the child's needs. The program continued for as long as the child needed it. Further, most boards indicated that the question could not be answered in any other terms, as the variation among children was too great.

Percentage and Location of Children in Intervention Programs

These two aspects of intervention programs were related in the detailed questionnaire and discussed together by the boards.

With regard to location, the overwhelming preponderance of intervention programs was in the regular classroom; the very few exceptions to this are given in the discussion below. With regard to percentages of children involved in intervention programs, two groupings emerged.

1. 51.9% (14) of the boards stated that they had no statistics available, replying as follows:
 - 7 boards had not compiled figures, but emphasized that the programs took place in the regular classroom;
 - for 6 boards the question was not applicable because they were still at a planning stage;
 - one board was also still planning, but indicated its intention to have intervention work mainly in the regular classroom.
2. 48.2% (13) of the boards gave statistics, often with accompanying comments. The figures are given, with summaries of boards' statements, in Table 24.

Table 24/ Statistics regarding Children in Intervention Programs
Reported by Boards in Selected Sample

% of Children	No. of Bds.	Accompanying Comments
100%	3	a) Modification for every child, in that whole class discussed with teacher, and further intervention might occur as a result b) Individual programming c) Withdrawal class totally
75%	1	Virtually all in regular classroom
40%	1	By grade 1
30% - 40%	1	Virtually all in regular classroom
25%	1	Virtually all in regular classroom
20%	1	Virtually all in regular classroom
10% - 19%	1	Virtually all in regular classroom
16%	1	Half in regular class, half withdrawal
8% - 10%	1	Mainly in special education classes
9%	1	Virtually all in regular classroom
4%	1	Virtually all in regular classroom
	13	

MAINTENANCE OF EARLY IDENTIFICATION AND INTERVENTION PROGRAMS

Costs of Early Identification and Intervention Programs

The boards were asked to estimate the cost per student to implement both identification and intervention procedure though the interviewers did not lay great stress on the topic, nor did they seek details. It seemed that boards had typically not developed a formal structure or procedure for dealing with the fiscal component of their procedures and that they tended to use widely varying frames of reference. Only the most general of pictures therefore emerged, which is outlined in the following discussion and summarized in Table 25.

Early Identification Procedures

- 48.2% (13) of the boards stated that no costs had as yet been determined.
- 25.9% (7) calculated the costs of the early identification procedures separately from the general budget and from the budget for their intervention procedures. These boards provided estimates, which are given in Table 25.

- 14.8% (4) included the costs as part of their regular operating budget, describing the program as involving no extra costs, or at the most, a "negligible" or "minimal" extra expenditure, absorbed without difficulty.
- 11.1% (3) calculated these costs jointly with those of the intervention procedures. These boards provided estimates, which are given in Table 25 (see following section, third item).

Early Intervention Procedures

- 66.7% (18) of the boards had not yet determined the costs of their intervention procedures.
- 18.5% (5) included these costs as part of their regular operating budget, absorbed without difficulty.
- 11.1% (3) calculated these costs jointly with those of the identification procedures. These boards provided figures, which are given in Table 25 (see previous section, fourth item).
- 3.7% (1) gave a specific figure.

Table 25/ Costs of Early Identification and Intervention Procedures

Costs	Number of Boards	
	Identification	Intervention
No cost yet determined	13	18
No extra cost, or cost absorbed as "negligible"	4	5
Costs per student calculated separately:		
1. 17¢	1	
2. \$1.00	1	
3. \$1.50 - \$2.50	1	
4. \$2.50	1	
5. \$5.00	1	1
6. \$9.00 (including secretarial and consultative time)	1	
7. \$350 (total for program, for production of materials)	1	
Costs per student calculated jointly:		
1. 75¢		1
2. \$3.00		1
3. \$125 (total for Medvedeff Kit)		1
Totals	27	27

Time Required for Early Identification Procedures

The boards were asked to estimate how much time was required per student for their identification procedures to be carried out. Virtually all the boards described their estimates as very rough, because they used ongoing procedures or teacher observation, and/or because they had not devised a method of calculating the time involved. Table 26 summarizes the boards' responses.

Table 26/ Time Required for Early Identification Procedures

Average Time	No. of Bds.
3 hours (plus ongoing observation)	3
2 hours	1
1 hour to 1 hour 55 minutes (plus ongoing observation)	5
1 hour	4
50 minutes	2
45 minutes	2
40 minutes (plus ongoing observation)	2
30 minutes	2
15-20 minutes (plus ongoing observation)	2
10 minutes (i.e., group of 6 children assessed in 1 hour)	1
Varies depending on number of sessions a child passes through	1
Unknown	2
Total	<u>27</u>

Number of People Involved in Implementing Early Identification and Intervention Programs

Almost without exception the boards stated that it was impossible to respond to this question in any systematic or precise fashion without a rationale for an appropriate mode of calculation. The major difficulties centred on the term "involvement," defining it, specifying type and degree, and distinguishing episodic from ongoing. The boards tended simply to refer back to earlier questions about type of personnel involved in both types of procedures, as providing the basis for any calculation, but disclaiming the present possibility of carrying one out.

In-Service Training for Teachers

The boards were asked to describe what in-service training, if any, they provided for teachers in two situations: (a) where teacher observation

was one of their identification procedures; and (b) in the implementation of intervention programs. They tended to discuss in-service training generally, including the two situations specifically mentioned in the questionnaire, and so their responses are presented to reflect this. A wide variety of provision emerged, which fell into the following categories:

1. 44.4% (12) of the boards stated they had in-service provision in both teacher observation and intervention procedures, as follows:
 - (a) Teacher observation and intervention procedures. Individual consultation or training by primary consultants for both areas (3 boards).
 - (b) Teacher observation. Some workshops.

Intervention procedures. Individual consultation or training by primary consultation or training by primary consultants (3 boards).

- (c) Teacher observation and intervention procedures. In-service work on child development, together with individual consultation or training by primary consultants (2 boards).

- (d) Teacher observation and intervention procedures. Extensive in-service for all personnel involved in both areas, including observation, diagnostic techniques, goals of program, programming ideas, evaluation, together with individual consultation and training by consultants (1 board).

- (e) Teacher observation. 2½ days workshops, and 1 day on identification procedures, together with training by primary consultants.

Intervention procedures. Individual consultation (3 boards).

2. 11.1% (3) boards stated they had in-service training on teacher observation, but not for intervention.
3. 25.9% (7) emphasized in-service training in the use of published programs, as follows:

- (a) Identification procedures and intervention procedures. In-service on the use of the Medvedeff materials (one also included the Myklebust rating scale) (4 boards).

- (b) Identification procedures. In-service on the use of the Windsor Early Identification Kit.

Intervention procedures. None specified (2 boards).

- (c) Identification Procedures. In-service on the use of the Windsor Early Identification Kit.

Intervention procedures. In-service on implementation of programs in relation to the Windsor materials (1 board).

4. 18.5% (5) of the boards stated they had no in-service training, either for teacher observation or intervention procedures.

Evaluation of Early Identification and Intervention Programs

Evaluation of Early Identification Programs

The boards were asked a) whether they had procedures for evaluating the validity of their identification programs; and b) if a program had already been evaluated, what were the findings. Their responses fell into the following categories:

1. 44.4% (12) of the boards had no validation procedures; most of them were still planning early identification procedures.
2. 25.9% (7) indicated some existing mode of formal, or systematic, evaluation:
 - 5 boards stated their procedures were validated, but without giving details. One of those boards had revised its original (validated) procedures, but had not yet validated the new procedures.
 - 2 boards did not have their own procedures for validation, but were using a packaged program either already validated (the Windsor Early Identification Kit) or in the process of being validated (the Medvedeff program).
3. 18.5% (5) had informal validation procedures, largely monitoring children and seeking comments and suggestions from parents and school personnel.
4. 11.1% (3) of the boards had a validation study in progress.

Evaluation of Intervention Programs

The boards were asked to describe how monitoring and evaluation were carried out, by whom, and at what points in the school year. Their responses were too varied for easy categorization and are therefore presented in outline below, but in detailed tabulation in Appendix 8.

1. Mode of Evaluating Intervention Program

- 66.7% (18) of the boards reported implementation of intervention procedures, with varying modes and degrees of evaluation;
- for 22.2% (6) of the boards, the question was not applicable, as they were still planning identification procedures;
- 11.1% (3) of the boards had not yet implemented intervention procedures but were able to specify what evaluative mode they would follow.

2. Time(s) of Evaluation

3. Personnel Involved in Evaluation

The boards' responses in these two areas proved too idiosyncratic to categorize, and are therefore given in detail in Appendix 8.

IMPLICATIONS OF EARLY IDENTIFICATION PROCEDURES

Introduction

At the end of the detailed questionnaire and their interviews, the boards were asked to suggest what future changes or developments were likely to occur as a result of their early identification procedures, in the school curriculum, in-service training for teachers and consultants, parent education, and special education placement. Because the relationship of boards' early identification procedures to these areas, or current impact on them, had already been discussed at length in earlier responses, there was overlap between comment on the past and present and speculation on the future. Nevertheless, the latter were distinguishable and are outlined in the following four sections. Most boards gave several implications in each area.

Implications for Curricular Change

1. The most consistent emphasis was on the increasing adjustment, adaptation, or development of programs to meet the needs of children because of teachers' heightened awareness of, and sensitivity to, the characteristics and needs of each child. The theme ran through the comments of many boards, but 59.3% (16) boards made it explicit. Some illustrations were:
 - Adjustment would be made of classroom programs according to the needs of each child, once special abilities, strengths, and weaknesses were identified.
 - Modifications were continually being made to programs to reflect students' needs. The board expected this to continue, to meet the needs of individual children.
 - Teachers were becoming more aware that each child was unique; programs were becoming more diversified, as teachers were discovering that no one program was appropriate for all children. Teaching techniques, methods, and approaches must also be diversified, and teachers were gradually being led to see this. The school curriculum was being more and more geared to meet the individual needs of children.
 - The board expected that children would progress without meeting failure.

- Children would have a better self-image.
2. Change in the focus of the school curriculum was given priority by 18.5% (5) of the boards, as shown:
 - The curriculum would become more prescriptive.
 - The curriculum would become more diagnostic and skill-oriented, and have a greater focus on evaluation of pupils and programs.
 - There would be increased emphasis by teachers on teaching children how to think rather than on specific content.
 - There could possibly be a use of a "mastery learning" approach.
 - There would be an increasing integration of Medvedeff practices into the regular program
 3. 11.1% (3) of the boards emphasized the preventive aspect of early identification work, as illustrated in the following:
 - The board expected fewer problems to remain unidentified or unassisted among older pupils.
 - Needs would be assessed earlier and prompt prescription of suitable programs would avoid any further remedial problems.
 4. 11.1% (3) reported at a very general level, as follows:
 - Increased flexibility occurred in curriculum expectations throughout the system.
 - Changes had already been noted in teachers' approaches to learning tasks, and were expected to continue.
 - The board expected a better formulation of goals and philosophy for the kindergarten and primary grades.
 5. 11.1% (3) focussed on increased responsibility being taken by teachers for their own curriculum and practices on the basis of increased knowledge about children provided through early identification procedures and/or in-service training. Thus:
 - Increasing emphasis was anticipated on child development, individual differences, and learning disabilities in in-service work.
 - The board wanted to provide developmental and psychological data on *all* children, to be used by teachers as a basis for programming.
 6. 3.7% (1) of the boards gave priority to greater communication between home and school.

Implications for In-Service Training

For many boards this subject was of major importance, while others had

hardly begun to think about it, though only one board did not discuss the topic. Typically, many points were made by individual boards. The implications seen by the boards broke down into six main clusters.

1. 40.7% (11) indicated that they needed more in-service training with intervention strategies to follow-up identification procedure. Some examples were:
 - There was a need for more training in dealing with learning problems and developing intervention programs.
 - Teachers would require training in the use of procedures, interpretation of results, and intervention strategies.
 - There was an enormous need for in-service training in providing intervention to deal with deficiencies.
 - More time was required to provide in-service training so that teachers could understand and cope with identified needs.
2. 29.7% (8) stated that they wanted more in-service training related to observing children and to understanding child development, as follows:
 - Provision already made through conferences and professional development days to provide staff with opportunities to develop, particularly with regard to the necessity of looking at each child individually and teaching to his needs and abilities. The board would continue to stress this as important in planning programs and identifying teaching strategies.
 - There was a need for much more training in early child development and observation of children.
3. 14.8% (4) suggested that there should be more in-service training for consultants as well as for teachers. Three systems specified the kind required:
 - Training in evaluating identification and intervention models and designing intervention strategies.
 - Liaison with current developments and trends in other jurisdictions.
 - More training required for teachers and consultants in the use of remedial materials.
4. 14.8% (4) made one of the following suggestions regarding in-service training for teachers:
 - That one-to-one discussion between teacher and consultant appeared to be a very effective means of providing in-service training.

- That in-service training had proved to be excellent in helping to define issues and increase interest.
 - That the system's early identification program could not be fully implemented until more in-service training had been given in the identification procedures.
 - That all teachers should have in-service training on Medvedeff materials to be aware of the program.
5. 7.4% (2) of the boards thought that in-service training was important, but made no specific suggestions regarding content.
 6. One board responded that in-service training was "actively being carried out."

Implications for Parent Education

1. 48.2% (13) of the boards said that they recognized a need for parent education but gave no indication that such a need was presently being met to any degree. Many of these boards expressed a wish for greater positive involvement by parents in the education of their children, for greater parental understanding of child development as it related to learning, and awareness of the goals of the identification programs and of the school programs in general.
2. 25.9% (7) of the boards indicated that they were actively involved in parent education to some degree through the use of one or more of the following: newsletters, information pamphlets, home-school association workshops for parents, personal contacts, and, in two cases, local television programs and a system-wide newspaper. It was suggested by a number of these boards that, because they saw parental awareness and understanding of the program philosophy, goals, and practices as vital, they intended to continue and in some cases increase this component.
3. 11.1% (3) of the boards indicated that they would like to train parents to implement intervention programs at home and/or in a volunteer capacity in schools.
4. 7.4% (2) anticipated no program. One indicated that, though seeing a need, board resources were too limited.
5. 7.4% (2) of the boards responded that nothing had been worked out yet on parent education.

6. 7.4% (2) made no response to this question.

Implications for Special Education Placement

1. 29.7% (8) of the boards expected or hoped for a reduction in later special education placements because of earlier identification and intervention. Some comments were:

- The board hoped that the need would be less at later levels since prevention was the emphasis.

- Less requirement for special education in the higher grades was expected because of early identification of children and remedial programs to correct the deficiencies.

Two of these boards qualified their answers on the basis of what appeared currently to be the case, as illustrated by the comment of one of them.

- Should reduce special education placement. However, the demand seemed greater and there were more referrals from teachers for assessment and remedial help, although this was on a withdrawal basis, not placement.

2. 22.2% (6) anticipated earlier intervention with the emphasis on meeting children's learning needs in regular classrooms rather than in special education placements. Some comments were:

- Emphasis should be on an enriched program for each child in a child-centred, language-centred, activity-centred environment, not rushing children into segregated situations.

- Early intervention with major emphasis on regular classroom location with classroom teacher and assistance provided within regular classroom, e.g., by teacher aides.

- An increase in informal consultation requested by teachers had occurred and some reduction in formal referral to special education. Distinction increasingly clear between asking for advice and making child a special education problem.

3. 14.8% (4) referred in general terms to the special education programs which should be available.

- Two boards said that special education programs should become more specific.

- One board expected a wider range of programs to be available.

- One board expected placements to be reserved for children with specific learning disabilities.

4. 14.8% (4) expected that more resources would be required in order to meet the needs discovered by the identification procedures.
 - Two boards anticipated a need for more money.
 - One board indicated a need for more resource teachers.
 - One board specified the need for more support personnel.
5. 11.1% (3) anticipated, or had already found, an earlier onset of special education placements or programs, e.g.,
 - Special education placement was sooner, more appropriate, and more effective.
 - Earlier placement, more classes, whether segregated or in a resource room setting, were occurring.
6. 7.4% (2) expected no change specifically related to early identification.
7. 3.7% (1) indicated that it was not yet sure what changes might occur.
8. 3.7% (1) indicated that while it wanted a focus on providing for the needs of children at an early age, it did not want a link between early identification and special education.
9. 3.7% (1) suggested that program placement and review boards would be vital.
10. 3.7% (1) emphasized that there would be no special education placement at the kindergarten level.
11. 11.1% (3) gave no response to this question.

4 The "State of the Art" in Ontario

INTRODUCTION

Sources

This chapter describes the authors' impressions of the state of early identification and related work being carried out by Ontario school boards. In keeping with the term "state of the art" the authors have attempted to convey a total sense of the current Ontario position. Rather than work out a detailed analysis, they have drawn attention to interesting, curious, surprising, important, and anomalous characteristics and implications of that position. The evidence on which they base these conclusions is twofold:

1. The results of the initial, province-wide questionnaire and of the second, detailed questionnaire, amplified in interview, given to the selected sample of boards, and reported in chapters 2 and 3 respectively.
2. The impression borne in on the research team of the "mood of the province," through discussions, comments, informal interviews, and conversations with a wide variety of people involved in many ways in early identification and related work. In more detail, the sources of such impressions were:
 - free comments written on both questionnaires;
 - comments made in telephone and personal conversations with school board personnel in follow-up work and reminders following the initial questionnaire;
 - comments made in personal interviews following the second questionnaire; these were lengthy, typically with a group of representatives, though occasionally with one or two;
 - comments made in informal discussion with school board personnel running programs and with teachers in these programs; and with both

types of personnel in formal settings such as workshops directed by team member on early identification work;

- discussions with Ministry of Education officials about the research study and the issues involved;
- discussions with academics working in the area of early childhood.

The "Mood of the Province"

From the above sources the following impression emerged of the mood of the school boards with regard to early identification work. The great majority of the boards expressed a strong concern to conduct early identification work and to conduct it well, and welcomed the fact of the Ministry of Education initiatives in the area. However, most felt a sense of pressure, of being pushed further and faster than they were yet ready to go because of insufficient time to prepare a program, nor were they sure what it should comprise. As a result, many boards expressed concern about whether they were pursuing the right path in developing their own particular arrangements. This concern was often associated with a sense of resentment or dismay that, while they were being required to set up early identification programs, they were not at the same time receiving ongoing advice and information from the Ministry. Even though they appreciated such collaborative enterprises as the OISE and Ministry Conference on Early Identification in the spring of 1979, they still for the most part looked to a style of guidance and information provision that went far beyond what such a conference could offer.

It is necessary to keep this pervasive mood in mind when examining responses in questionnaires and interviews. So strong was it that it often became the subject of analysis itself in discussions and interviews, thus shedding light on the motivation and attitudes of boards.

Framework

The general conceptual framework presented in the introduction to chapter 3 and which guided the selection of issues to be addressed in the detailed questionnaire was kept in mind in this chapter. It is repeated below for convenience:

Rationale:	goals, focus
Nature:	selection, types, implementation, results
Maintenance	
a) practical:	costs, personnel, time

b) substantive: in-service training, evaluation
Implications: for in-service training, parent education, special
education placement, general curriculum

However, the themes which emerged in the writers' analysis of findings dictated their own format, as will be evident.

Boards' Perceptions of Terms

As the investigators were required to find out what the school boards were doing in early identification work, they had to leave the boards free to describe their work in their own way. Thus, terms such as "early identification program" could not be specified further, for it was considered of primary importance to get the boards' unguided perceptions of their work in early identification. As a result, there emerged the seemingly anomalous findings reported in chapter 2, headed "Proportions of Boards with and without Programs" (p. 7). In summary, while 87 boards stated they had early identification programs, of the remaining 42 stating they had none, in fact 33 reported activities similar to those given by some of the 87 boards as constituting their early identification programs. The reasons for over one-quarter of the total number of elementary school boards surveyed "misallocating" in this fashion can only be inferred from details given in the questionnaires and interviews, and open-ended discussion in the latter. On this basis, it seems likely that many boards did not accord their early identification work the status of a program when that work was not system-wide, or did not use a pre-packaged methodology, especially the Windsor material. In addition, data from the selected sample drawn from the 87 boards describing themselves as having a program indicated that around half were still at a planning, piloting, or only partial implementation stage, a situation likely also to obtain in many of the 42 boards stating they did not have an early identification program.

This example of different interpretations by boards has also an importance beyond any of the many examples that could be cited in this study. The investigators could have followed a logic other than that which they established from the outset, by ignoring the boards' claims to have or not to have an early identification program and inferring the boards' actual status in this regard from the details of responses. As a result, a very different position could have been claimed to exist. If all descriptions of activities claimed by the 42 "No" boards *not* to be early identification programs, but showing similarities to activities

claimed as programs by the 87 "Yes" boards, had in fact been counted as programs, then 120 boards would have been described as having, and only 9 as not having, early identification programs. All the tabulated results would consequently have been very different from those presented in this report, as also would be the interpretation of the facts of practice and of "the state of the art."

Although the research team chose to work from the boards' own unguided perceptions of terms and activities, and did not consider the use of their own inferences as outlined above, nevertheless the presentation of such a possibility may help to emphasize that the questionnaire and interview data in this study were reports or perceptions. Thus, the research team had to interpret and evaluate interpretations, a process requiring caution.

Further, the investigators attempted to reduce the possibility of "steering" boards by keeping their own position undisclosed in the questionnaire. In the interviews based on the second questionnaire investigators attempted to have board representatives develop their own practice within their own declared frame of reference, and only after discussion of the substantive issues did the investigators express their own theoretical position. Though this tended to produce further comment, the interviewers did not find basic positions being restated differently as a result; in fact, board representatives occasionally found it easier to discuss their feelings about early identification work.

The emphasis laid in this section on issues involved in analysing boards' perceptions needs to be balanced by an acknowledgment of boards' difficulties in reacting to the research survey's questionnaires and interview procedures. After the return of each questionnaire many areas emerged as requiring amendment or addition. Deficiencies and ambiguities were without doubt present, and for these the research team assumes full responsibility. At the same time they wish to reiterate that the exceedingly generous cooperativeness of the boards much reduced the impact of their inadequacies.

Scope of Discussion

The commission to present a picture of "the state of the art" implies the determination of patterns, trends, and emphases; it is consequently best developed at a fairly general level. Commentary will be made on the findings of the survey within the loose conceptual framework, under the

heading "Framework" (p. 56), of this introduction, and summarized in a final section. Readers, however, are encouraged to draw their own conclusions from the details given in chapters 2 and 3 and to relate those, where possible, to their own impression of the attitudes of board personnel.

GENERAL ANALYSIS OF FINDINGS

Rationale

It was clear from discussions with personnel in the selected boards and in early childhood education work in general that Ministry of Education initiatives had made school boards sensitive to the idea of early identification work. In some cases, a feeling of being hurried into establishing procedures without being prepared was expressed. Where 42 boards stated they did not have early identification programs (see discussion in "Boards' Perceptions of Terms, p. 57), 18 of these had a basic procedure in the Public Health Unit screening (15), or other (3), arrangements and the remaining 24 claimed fiscal, personnel, ethical, and other reasons, without giving details. Thus, a general awareness of the area was apparent, an impression heightened in the detailed questionnaires and interviews.

In the interviews, when asked to specify the goals of their early identification programs, the 27 selected boards gave clear and virtually equal prominence to two types of goal - those emphasizing the identification of, and programming for, "high risk" children (22), and those emphasizing the identification of the abilities of all children in a class (21). In the first case, according to the boards, early (or earlier) identification could enable "different" children to receive special attention at an earlier stage. Typically the provision of earlier attention was discussed as a preventive measure; the boards were strongly interested in attacking problems at the earliest possible time, in order to prevent or reduce the need for late remedial or special education. Where early provision of a "special education" sort was discussed, it was only for children with handicaps such as serious sensory loss, severe retardation, or incapacitating physical handicap; even in these cases, boards stressed a preference for placement in the regular classroom setting with support services rather than removal to separate settings.

The second type of goal, as amplified by the boards, focussed on providing teachers with information useful in programming at a class and/or individual level. Interestingly, when discussing of goals of this sort, although

they often referred to or implied a screening procedure as being the routine means to providing information of this sort, they did not discuss screening in deficit terms. Screening has typically been used in practice, and referred to in the literature, as involving two primary features: (a) the application to a total specified population, e.g., all kindergarten children, of a set of procedures or measures; (b) in order to "screen out" those children who will require further attention of some sort. In their discussion of identifying the abilities of all children in a class, board personnel typically reflected much less a "screening out" approach than a "review" approach, the purpose of which was to enable teachers to program and teach in a more individualized fashion. Further, though this type of goal was given only partly in formal responses, it was spontaneously given much more extensive and enthusiastic discussion in interviews with the research team. Boards further expressed near unanimous opposition to special class placement in the early school years, emphasizing the role of teachers as dealing with all children, including those considered "different," within the "regular" class, and looked at within the same conceptual/educational framework as the bulk of children. Again, in discussing the criteria for selecting identification procedures measures, the most prominent criterion was to do with providing a developmental profile (17 out of 27 boards). Indeed, out of 16 criteria listed by the 27 boards, only two reflect a deficit emphasis, namely, "to predict future learning success, usually specified as in Grade 1" (6 boards), and, "to be able to identify high risk children" (1 board).

Thus, the impression left with the interviewers after discussions with the boards was that they saw the basic purpose of early identification as to assist teachers in the development of all children, including those considered "different," even though they gave virtually equal *formal* priority both to that goal and to the identification of "high risk" children. However, the boards, while routinely mentioning screening procedures, did not typically discuss what the results of such procedures were and how they were to be used in an educational setting.

Rationales were usually expressed at a fairly general level, not only for early identification programs as a whole but also for specific aspects. Some discussants commented that, in responding to the questionnaires and interviews, they had crystallized their positions more thoroughly than before. Many also referred to aspects of the literature or practice in the field as source material for ideas or as offering comparisons with

their own work in the area of goals, but the questioning format allowed only for a general impression rather than a precise categorization of responses.

A final impression left with the investigators was that the boards often seemed to regard early identification more as an "extra" attached to the educational system than as an integral element in it. Though "a good thing," the reasons for this being so were often general, and the distinctions between long-term and short-term goals were often vague, implying a somewhat undeveloped notion of the procedure.

Early Identification and Intervention Procedures

Even allowing for the boards' freedom to interpret terms in their own way, there was frequently a lack of clarity within boards about what constituted for them, for example, a procedure or a technique. Board personnel generally tended to talk of tests, informal or formal, or of techniques such as teacher observation, under the term "procedures," but only occasionally referred to a system-wide dimension of educational provision under this term. The broadest category of procedure generally referred to was screening, usually identified as the work of the Public Health Units. A term often used in different ways within a board was "assessment," ranging from individual assessment of a child selected as problematic to a general "looking at" all or many children. Given this variety of interpretation of terms between, and inconsistency of usage within, boards, interpretative comment has to be cautious, but several trends are nevertheless clear.

Selection of Procedures

The most striking characteristic of board practice was that, whereas the formally stated criteria for selection of procedures had to do with educational relevance, usefulness of results for teachers, immediacy, and practicality, there was little evidence that procedures and measures in use had been carefully chosen to meet these criteria. This is most clearly shown in the following three aspects of the selection of procedures.

Characteristics Assessed. In the first questionnaire boards were asked to state the characteristics they attempted to measure by listing in order eleven traditional areas for them. No specific request to nominate areas was made in the second questionnaire, but in the interview

discussions, board personnel tended to describe the characteristics they focussed on in their early identification procedures. It emerged that all the selected boards measured, or planned to measure, motor, sensory, perceptual, language and cognitive development, and virtually all socio-emotional development, still a set of traditional categories. The notions of how a child learns or approaches the school situation were not discussed as central to the assessment or measurement process, but tended to occur more as second stage, though critical, aspects of children's functioning, once the identification process had taken place. Traditional notions, thus, seemed to have priority as psychological constructs; children were characterized in the first instance within these somewhat static terms. Following such characterizations, the boards demonstrated a variety of modes of translating them into educationally useful and usable terms, such as developing learning profiles and working out programs, especially by means of consultations between teachers and consultants.

Criteria for Selection of Instruments. The emphasis across boards on usefulness of instruments was not matched by any emphasis on ensuring that the instruments, measures, or packaged programs met elementary psychometric standards of validity, reliability, and standardization. Very few boards reported having applied psychometric criteria to instruments available to them for selection. It seemed generally to be accepted or assumed that existing instruments had adequate validity and reliability, and were being applied to an appropriate population. In some cases, board personnel seemed fairly unaware of the significance of psychometric criteria in deciding on the usefulness of a measure. However, it is fair to point out that many board personnel simply had no experience in the analysis and selection of measures and/or had not been trained in these skills. Further, in many of the boards which were developing their own materials, or had already done so, there was an obvious awareness of the importance of satisfying psychometric standards, even though there was variation in the degree to which such recognition had been expressed in practice.

Familiarity with Measures. Boards often displayed surprising unfamiliarity with measures and programs of identification and intervention, formal and informal. In the responses to the first questionnaire many boards, in listing measures used in early identification, gave instruments which could not possibly be applied to young children, because

of inappropriateness or difficulty of content. The list often included tests that can only be given on an individual basis and are too lengthy to be used in a screening approach, such as the Stanford-Binet Intelligence Scale or the Wechsler Intelligence Scale for Children. Further, boards often allocated tests to a wrong category (e.g., standardized rather than informal) and frequently gave incorrect names to tests. The latter is not a niggling criticism of inattentiveness to detail; if tests, instruments, techniques, or programs are in widespread use, and if a board uses one or a group of these constantly, the authors consider it reasonable to expect familiarity with their basic characteristics.

It is interesting to note that the Windsor Kit was by far the most widely used board-developed procedure; however, a common statement or clear implication by board personnel was that they had adopted it at least partly because they perceived it as having received Ministry of Education endorsement.

Implementation of Procedures

Patterns of implementation have already been discussed in chapter 3 and appropriately reflect a wide range of practice. Some important trends emerge from examining the different boards' practices.

Role of Teachers. As one follows the process of early identification through from planning of procedures to the implementation of a teaching program, that is, from the decision-making to the execution, the role of teachers becomes increasingly important. Of the 27 selected boards, 9 had teacher representation on the planning committee dealing with all procedures, a further 5 had teachers dealing with the selection of some procedures or the modification of an existing package, 1 had teachers involved in selecting instruments, and the remaining 12 had teachers involved in commenting on the procedures and instruments already selected. In the implementation of early identification work, 13 boards said classroom teachers were the key, and 7 the only, personnel involved; 6 gave teachers the primary role in classroom observation; only 1 did not do so, giving the major role in most situations to the early identification program teacher. While all boards gave the results to classroom teachers, there was generally no systematic provision for the interpretation of results from early identification work into usable classroom terms. The process of developing suitable teaching approaches and content from early identification results was not in fact typically discussed as a separate

stage in the identification-intervention continuum; discussion of this stage was largely in terms of teacher-consultant interaction but its importance as a decision point appeared to be underplayed.

At this point, classroom teachers were clearly stated to be the most important source of referral for further assessment. They were even more clearly identified as the primary agents responsible for dealing with "different" children, as boards were overwhelmingly against both special class placement and the use of packaged programs.

Role of Parents. Parents were discussed primarily as sources of permission to test children, and of information about them. The first role was considered to be generally easy to establish; parent cooperation was the norm. Out of the 27 boards selected, 22 emphasized their use of parents in establishing general profiles of kindergarten children and of their backgrounds at school entry, usually through interviews at school. Similarly, 23 of the selected boards routinely shared early identification information with parents. Of the 129 boards responding to the initial sample, 37 stated that parents might be sources of referral for individual assessment, that is, further assessment and presumably at least partly on the basis of information from the early identification process. Most of the 27 selected boards indicated that they maintained a general contact with parents, involving information exchange, within which parents might be asked to reinforce aspects of the school's program, or be given suggestions about activities useful for their child's academic or general development.

The relationship between boards and parents appeared to be somewhat general and often vague, with some notable exceptions where boards had well-developed and clearly specified arrangements for parent involvement. On the other hand, when asked to discuss future possibilities in the area of parent involvement, boards generally seemed to lack ideas, and hardly developed discussion beyond their current position. The majority stated they saw a need for increased parental involvement but often seemed to equate it with parental education, such as increased awareness of the goals of the board's early identification program or better understanding of child development.

Although boards clearly saw parents as important in the education of young children, the role allotted tended to be that of the ancillary more than the partner, even though the terms used were very often those of partnership. Only a very few boards, for instance, seemed to view parents

as co-assessors or as able to be continuously involved in the building up of profiles of their children during the early school years. The boards seemed unaware to a large degree that they had adopted an exclusivist perspective and were underutilizing a rich resource.

Role of Public Health Units. Public Health Unit information was gathered on children in all boards, and typically before children entered kindergarten. However, the exact relationship between boards and Public Health Units, the type of information made available by the latter, and the degree of usefulness it bore, were not always clear. It would seem obvious that Public Health Unit information could routinely be of some use to school systems in dealing with their own entrants, if only in general or background areas. Yet of the 27 selected sample only 14 stated they used Public Health Unit personnel as gatherers or sources of information, and only 8 shared the results of their early identification procedures with the Units. Perhaps a few more included Public Health Unit personnel under the rubric of "any professionals considered relevant" (3 boards), "outside professionals" (3 boards), or "family physicians and other medical personnel" (4 boards). Within the selected boards, 5 still used only the Public Health Unit screening as their early identification procedure; 8 also used the results of the Denver Developmental Screening Test, typically administered by Public Health Unit nurses. It is interesting to note, in passing, that while 8 of the 27 selected boards used Denver results, only 15 of the 129 boards responding to the original questionnaire claimed to do so, whereas proportionately many more might have been expected. Significantly, in interviews board personnel often commented that they were trying to improve communication with their local Public Health Unit with regard to sharing pre-kindergarten information. Several boards seemed satisfied with the timing and content of the information they received from the local Public Health Unit, but added that both groups had worked hard to achieve this result.

A Note on Day Nurseries. In neither questionnaire was the use of information from day nurseries previously attended by kindergarten children formally addressed, but in the interviews there was a heavy emphasis placed on identifying the various sources of information available to teachers as they took in their new classes. While Public Health Units, parents, tests, and interview schedules were spontaneously and routinely brought into discussion, only in a very few cases was the possibility raised of obtaining information from agencies previously attended by

kindergarten children, such as day nurseries. Although probably no more than 10% of Ontario pre-kindergarten children attend day nurseries, they are clearly valuable sources of information. Day nurseries provide evidence of children's functioning in an organized environment, with similarities to kindergarten, and as such are in an important sense precursors of the school environment. Moreover, as societal provision for young children becomes increasingly viewed as a continuum, the appropriateness of the systematic linking of school and preschool provision becomes obvious.

GENERAL CONCLUSIONS

The areas discussed above represent only a selection of the issues implicit in the descriptive presentations of chapters 2 and 3. This section reflects that selectivity, in exaggerated form because of its brevity. The conclusions are necessarily general and exceptions are likely to exist to each general case. Readers are encouraged to develop their own general conclusions on the basis of their own reading of the evidence provided in chapters 2 to 4.

Boards were virtually unanimous on the need to have an early identification program, however constituted; they acknowledged Ministry of Education initiatives in giving prominence to their areas but often felt they were being hurried, rather than guided, into it. Early identification work varied widely across the province in degree of attention and resources given to it, scope, procedures, type of personnel involved, goals, and many other aspects. Boards seemed to function to a large degree independently of each other; they typically depended for ideas on goals, procedures, techniques, and measures only to a limited extent on a research data base or the general literature in the field. General rationales and program goals tended to lack clear expression in procedures.

Early identification seemed to be conceptualized more as an "extra," an attachment to the educational system, than as a dimension of that system; it still had a specialist, "different" aspect; it was typically seen in "once-for-all" terms rather than as the first of a series of reviews conducted throughout a child's school career; and many boards seemed to narrow the early identification process to an initial interview/screening/testing, underemphasizing the ongoing observation, assessment, and monitoring by class teachers of children's performance throughout a few weeks or months.

At all stages of early identification, practice varied considerably between boards but trends were apparent. Generally, boards did not give the impression of working from a crystallized position which viewed the procedures as a totality. Emphasis tended to be placed on the mode of assessment, and, though many boards had developed their own instrumentation, too many still seemed to depend uncritically on existing measures. Boards emphasized the key role of classroom teachers at all stages of the identification-intervention continuum, with the exception of the planning stage. However, their various roles were often vaguely formulated, and arrangements for support and in-service training were generally not well-developed. Further, boards seemed to have given little consideration to means of evaluating their early identification programs.

In discussing the conceptual aspects of early identification, board personnel seemed to have given less consideration to the implications of early identification work than to the practical problems of developing and maintaining programs. Thus, though board personnel typically emphasized that children identified as "different" would not be placed outside a regular classroom, with very few exceptions, they did not develop their position beyond this point. In the same way, questionnaires and interviews revealed that, while boards placed equal and strong emphasis on gathering information on *all* children in an entry class, and on identifying "high risk" children, they did not formally crystallize the logically resultant notion of developmental review of all children, including those at risk.

The analysis of "the state of the art" in early identification work in Ontario contained in this chapter holds many implications for change, development, and growth. Some of these implications have been discussed in previous sections, and others may emerge in the light of the ideas and practices obtaining in Canada in general, and in other countries that are discussed in the following chapter. The research team's recommendations for bringing about useful change in early identification work in Ontario are contained in chapter 6.

5 The Wider Field

INTRODUCTION

Scope

As the commission of the investigators was to describe early identification work in Ontario, their primary thrust was to gather information directly related to that topic. In addition, they sought to gain an impression of work outside Ontario in order to identify major trends, emphases, and issues in the field. This was necessarily a selective process due to constraints of time and accessibility of data. Thus a detailed international review is not proposed here; nor is the wider overview offered as formal source material for direct comparison with Ontario, since differences in cultural, educational, and political styles and assumptions make this difficult. Instead, an impression of "the state of the art" in some areas of the world is presented, following this report's detailed description and analysis of Ontario's work in the field.

The wider literature survey attempted to identify rationales, theoretical frameworks, and actual processes and techniques in the area of early identification and children's learning abilities and disabilities, which were then utilized in two ways. First, in identifying major developments, it was possible to establish areas of enquiry that offered guidelines in shaping the detailed Ontario questionnaire and interviews. Second, once the Ontario data were studied independently, the authors returned to outside sources in order to help in shaping an interpretative framework for some of the elements presented in preceding chapters.

Although the material from outside Ontario is discussed according to the authors' perception, that perception is consonant with major writers in the field such as Meier (1976), Shipman (1979), Stukát (1973) and Sumner (1979). Readers are referred to the literature in the field and

this report's bibliography for more detailed descriptions and analyses of early identification and intervention work outside Ontario.

Sources

Due to the practical reasons previously mentioned, much of the work from Continental Europe, Australia, New Zealand, Israel, and other countries was not traced, and the surveys were eventually confined to the United States, Britain, and the other provinces of Canada. For the United States and Britain, the research team depended largely upon secondary sources, although these were not plentiful in the British case. Approximately thirty American and fifteen British programs were studied.

In tracing information about early identification work in Canada outside Ontario, secondary sources were almost totally lacking, and the investigators pursued their enquiries through correspondence, telephone communication, and location of primary sources such as provincial government policy statements where extant and accessible. While this somewhat frustrating process produced scant Canadian data, comments of respondents in Ministries of Education across Canada generally supported the writers' impressions that the paucity of gathered materials reflected the actual situation to a fair degree.

RATIONALES

Recent Background

Similar developments on both sides of the Atlantic in the field of early identification appeared to be based upon common factors in research and reaction to current education practice. First, longitudinal studies and surveys of prevalence of learning disabilities or school failure had indicated that environmentally disadvantaged (poor) children had lower levels of academic attainment than other children. (It is interesting to note, however, that more recent research does not consistently support the traditional position.) Simultaneously, emphasis upon later school remediation was increasingly criticized for its inadequacy in dealing with children's cumulative learning deficits.

Many investigators and practitioners were recognizing that standardized testing based upon inadequate or faulty statistical data was unable to provide prescriptive diagnosis. The resulting labelling fostered a deficit model emphasizing the pathology of an "exceptional" or "different" child, and undermined attempts at effective curriculum development and teaching

strategies by discouraged school personnel who expected little progress from their students.

Additionally, focus on inadequacies of teacher training, embedded in broader criticisms of (special) educational practice, were included in Canada's Kendall Report (1969), CELDIC Report (1970), and SEECC Report (1971). Similarly, the Bullock Report (1975), a British study on the causes of reading failure, also identified lack of continuous and relevant teacher training as contributing detrimentally to the remedial system.

The critics in North America and Britain also argued that persistent school failure, belated diagnosis, and reactive segregation damaged the self-esteem and motivation of children trapped in a cycle of disadvantage and failure.

Other studies in the area of infant and early childhood education reinforced the concept that successful intervention in children's environments could provide both compensating and enriching experience fostering the fullest development of learning potential. Theoretical orientations differed from study to study, but in general adhered to developmentalist models such as the Piagetian, and viewed events, environments, and relationships as interrelating factors in the child's cognitive, emotional, and physical development.

Briefly, the American response, within a public climate increasingly supportive of equal opportunity, led in the sixties to a federal mandate for the initiation of Head Start programs. At first conceived as short-term pre-school preparation for disadvantaged children, their terms of reference were broadened in some cases to include home-based and community-developed early education as well as extension into the early elementary grades with follow-through projects. Isolated Canadian programs adapted from the American programs also were initiated, many of them short-lived owing to the temporary grant-based job-creation nature of financial support and to the curtailment of many daycare services in a number of provinces.

In the United States, committees such as the President's Commission on Mental Retardation and organized parent lobbies such as the Association for Children with Learning Disabilities, showed concerted and effective advocacy action. Like disadvantaged groups, disabled children were perceived as a minority group whose rights to equal education were being denied through procedures such as segregated programming.

The subsequent Education for All Handicapped Children Act (1975)

provided states with financial incentives to develop programs for the educationally handicapped, with specifications regarding provision of assessment and services. This was a federal legislative attempt to encourage accessibility to education. Extension of the mandate included broader categories of disabled children, creating debate regarding definitions, quality of educational provision, and eligibility criteria for funding.

In Britain, some parallels may be found. The Plowden Report (1967), in its identification of clusters of environmentally and educationally disadvantaged children, recommended the establishment of Educational Priority Areas following the concept of "positive discrimination," and a number of compensatory studies and programs were undertaken. Other nationally commissioned studies, such as the Court Report (1976), an examination of health needs, and the Bullock Report (1975), gave weight to an increasingly prevalent emphasis on prevention. Recommendations for mass screening of children were implied or specified.

The Warnock Report (1978) examined the British education systems for handicapped children and youth, and recommended that segregated education be abolished with the exception of services for the most severely handicapped. Partly on the basis of the Commission's observation that up to one in five children will require "special" education at some time during their school career, and partly in response to a critical review of current educational practice, the Report advocated educational integration, and the early identification and monitoring of individual children's learning needs. The latter would allow individualization of curriculum and teaching methods, and the key personnel for the execution of such tasks would be the regular teacher in the regular school, using a variety of supports.

As in Britain and the United States, public debate and attempts at policy formation in Canada are divisive. Some groups fear that current moves towards mainstreaming will deprive handicapped children of even minimal supports that were hard-won. Other advocacy lobbies look to declining emphasis on concepts such as normality and deviance, and argue for equal accessibility to individualized high-quality education founded on preventive practice.

Goals of Programs

Thus, some aspects of international research and criticism of current practice have led to a perceived need for procedures whereby large groups

of children can be screened as the first step in prevention. Few alternatives to standardized testing were apparent a decade ago. Consequently, researchers in many countries began to devise suitable procedures, many of them now available commercially. While major differences existed with reference to implicit assumptions, explicit values, specific areas selected for testing, and methods of rating, in general many of the measures recently developed had some elements in common. Many, for example, were for use by regular classroom kindergarten teachers; most were criterion-referenced and gave some theoretical consideration to links with intervention procedures; few laid claim to offering sophisticated diagnostic information; and almost all were in experimental stages, with predictive validity yet to be determined.

One question posed by the research team was the extent to which the use of such measures corresponded to the demand for more effective and preventive education provision for young children. The question is addressed in the following brief examination of articulated goals of programs in Canada, Britain, and the United States.

In Canada, all provinces indicated, in response to the research team's enquiries, that some form of identification of exceptional children existed, and also (with the exception of Manitoba, now in the planning stages) that some form of identification for "at risk" children was in place. On the other hand, with several exceptions, no indication was given that an intervention component was linked with the identification procedure, nor was the rationale for the use of screening procedures specified.

British Columbia was one such exception, stating it had a comprehensive province-wide program of early identification and intervention. The stated purpose of British Columbia's program, however, was the identification of those children in the top 15% (learning potential greater than "average," thus requiring enrichment) and the bottom 15% (learning potential less than "average," thus requiring special provision).

A preliminary survey of Canadian sources would seem to indicate that, proposed theoretical and advocacy considerations notwithstanding, nowhere is systematic early identification being used to ascertain individual profiles of strengths and weaknesses for use by regular classroom teachers in devising individual programs and monitoring teaching effectiveness.

In Britain, too, the general focus of implemented programs was identification of "at risk" children despite lack of evidence for the predictive power of screening devices. There were several exceptions

where at least theoretical emphasis was given to avoiding the use of screening as a static predictor, but little evidence was available regarding the monitoring of effects on teacher practice and program development. The techniques used seemed to provide an early warning system indicating that specialized diagnostic and consultant input or services might be needed. Some variation was found in the orientation of the Croydon system (Wolfendale and Bryans, 1979), where a curriculum package was devised to suggest specific methods for structuring learning activities for children with indicated specific weaknesses.

The published American program data available to the researchers seldom made explicit the purpose of screening beyond reference to federal legislation. Some programs did in fact articulate such objectives as equality in educational accessibility or prevention/compensation, but most of the screening devices used in educational settings were simply offered with description of characteristics tested and the technical screening methods used.

There does, then, appear to be a dichotomy between the objectives (implicit and explicit) of early identification practice currently under way, and the research and lobby impetus for advocating screening as preparatory to intervention. It is beyond the scope of this report to establish the reasons for such discrepancies although several are suggested. The dichotomy may relate to the traditional time gap in ideas filtering from theory to practice; to the unwillingness or inability of school personnel (administrators, teachers, trustees) to effect substantive change; or to the lack of financial commitment to early identification work. Further possibilities may be derived from the discussion of programs in the next section.

EARLY IDENTIFICATION AND INTERVENTION PROGRAMS

Types of Early Identification Measures

No clear information was available from Ministries of Education across Canada regarding the types of early identification techniques or instruments currently in use. In Britain, out of fifteen programs surveyed, a fairly even division occurred between standardized tests such as the British Ability Scales and the Reynell Developmental Language Scales, and developmental checklists or profiles such as the Croydon Checklist, the Swansea Evaluation Profile, and the Bury Infant Learning Check.

The American data indicated that the most frequently used type of

instrument (reported by 88% of the 27 programs examined) was the published test, or a battery of such tests. Some of the programs did use more than one type of measure, but despite increasing evidence recommending multi-dimensional information sources, only 34% of the American programs surveyed used three or more sources, with 66% using one or two types of identification techniques. The tests reported as most commonly used in the American literature are listed below in alphabetical order:

Bender Visual Motor Gestalt Test

Caldwell Preschool Developmental Screening Test

Denver Developmental Screening Test

Frostig Developmental Test of Visual Perception

Goodenough-Harris Drawing Test

Meeting Street School Screening Test

Peabody Picture Vocabulary Test

Slosson Intelligence Test

Several commonly used locally devised instruments which have been standardized and subsequently published, in addition to the Meeting Street Test, were the Yellow Brick Road, D.I.A.L., and Search. An unpublished locally devised measure in common use was the Screen Battery, and teacher observation instruments reported in use included the Behaviour Checklist, Devenaux Elementary Rating Scale, Pupil Behaviour Rating Scale, and Schenectedy Kindergarten Rating Scale. When utilized, non-school information was provided through six possible sources: parent interview, developmental questionnaire, physical examination, neurological examination, assessment of sensory acuity (vision/hearing), and assessment of speech/language development.

Types of Early Intervention Programs

Intervention programs were not categorized as simply as identification measures, and a variety of classification measures were suggested in the literature, of which four are briefly reported here. Day and Parker (1977) described intervention programs according to three theoretical orientations: theories of development, theories of component skills involved in language or reasoning, and theories of learning. Evans (1975) made similar distinctions when comparing twenty-two American Follow Through projects, each of which he assigned to one of four models: cognitive discovery, discovery, pre-academic, and client-controlled educational programs directly accountable to the community served.

Blank (1970) distinguished intervention programs in three ways, by

content rather than by theory: programs of verbal enrichment, programs with focus on perceptual dysfunction, and programs with primary emphasis on language. Meier (1976) differentiated between prevention/identification procedures for pre-schoolers according to behaviour modification techniques, medical/physical modification techniques, and educational modification techniques. He also differentiated between intervention procedures for pre-schoolers and primary prevention programs for infants and toddlers. The latter included programs with a number of purposes, such as parent-initiated infant stimulation centres for children with diagnosed developmental handicap who were at risk for cumulative global deficits, or parenting model centres where infant enrichment was attendant upon mothers with multi-agency involvement learning from professionals.

The British programs using the Croydon Checklist and the Visual Pattern Recognition Test provided specific packages of exercises and materials to be used in the regular classroom as the major intervention component, while the Birmingham program was devised to select children for intervention based upon withdrawal from the regular program. Some caution must be used in directly comparing the focus of such programs, however, since rationales for development of the identification and intervention procedures are not always parallel.

In Canada, intervention programs, where they existed, seemed generally to be conceived as segregated or partially segregated, comprising classes for children screened as high risk. For example, British Columbia's program, previously mentioned, was prefaced by a structured observation period of three to four months in kindergarten and grade 1, leading to the skimming of the top and bottom percentages of children into specially designed intervention programs (not yet developed beyond the first grade). The identification component was developed and the intervention component was being field tested in eight districts containing 160 000 children. No data were available on the curriculum or learning areas to be developed. There were, however, preliminary indications that the program would be implemented in all the provinces' schools, with concomitant development of regional diagnostic centres. As with the intervention programs, these centres did not appear to be conceived on the basis of formulating individualized educational programs ascertaining children's learning needs, but rather focussed on treatment of specific deficits.

In the United States, because intervention programs such as Head

Start were available before early identification was initiated (unlike British and Canadian practice), the majority of the 27 programs surveyed reported linkages between screening and intervention. Of these programs, 13 provided "high risk" children with some form of intervention program and/or referral for further diagnostic assessment, while 3 programs placed high risk children in a pre-planned program with focus on specific deficits. Three programs provided teachers and/or parents with information from the screening, in the absence of any other form of intervention. Of the 27 studies examined, only 3 reported that individual intervention programs were developed based upon early identification of each child's strengths and weaknesses.

"High Risk" Registries

In 1957, Britain experimented with a "high risk" children's health registry maintained by local boards of health. It was hoped that among the 20% of babies selected, some 80% of handicaps would be found, although a survey conducted in 1967 did not bear out such hopes. Widely criticized and mostly abandoned, the registries were based on an assumption that there were identifiable early factors having predictive value for the detection of handicaps. Clinical experience, however, showed that handicaps occurred in appreciable numbers of children in whom no such factors had been identified.

Even in cases of identifiable factors, registry problems arose because there was no agreement on what the criteria were, and there was lack of knowledge about the relative importance of different factors. These difficulties resulted in "risk registries" that may have included up to 60% of the population, a problem with possible parallels to early identification procedures.

Timing and Location of Early Identification Programs

Screening programs in Britain's school systems generally identified during the infant school stage (ages 5 to 7½), somewhat later than many North American programs. Screening usually occurred after the initial school adjustment period was completed. Several programs which involved monitoring in a more continuous manner also instituted periodic screenings throughout the junior schools, on the assumption that a child's education progress was neither static nor linear.

Most of the American programs - 64% of the 27 programs - administered

some form of screening prior to kindergarten entry, a phenomenon related to the development of compensatory pre-school intervention programs in the United States. Only 8% utilized one screening at the beginning of or during grade 1, whereas 20% applied one screening at the beginning of or during kindergarten. Four percent of programs administered several screenings both before and during kindergarten, and 4% administered several screenings during the kindergarten year.

In the American programs, the most common location for screening administration was the school (55%), a community site (33%), and the home (12%).

In Canada, early identification techniques were generally applied prior to or just at school entry. Quebec, for example, initiated readiness testing in kindergarten, while New Brunswick carried out pre-school screening in the community prior to fall school entry. Both of these provinces had voluntary subscription to their programs at board or school level.

In contrast, a few provinces required a period of orientation and observation prior to the administration of screening. Nova Scotia formerly had a program of screening conducted in the spring prior to school entry, but abandoned that schedule in favour of a kindergarten orientation period in early September. British Columbia's orientation/observation period was somewhat longer, allowing for a three- to four-month period in kindergarten and grade 1. The large majority of British and Canadian screenings were administered in the schools.

Implementation of Early Identification and Intervention Programs

Comparative data on personnel categories involved in implementation of screening and intervention were scarce, but some trends did emerge. In Britain, the classroom teachers played a very active role in early identification and in some programs, such as Croydon's, the teachers helped initiate and plan the project, as well as coordinating some program aspects. There was also accommodation for teacher assessment of the quality of in-service training. The Birmingham program also reported in-service training and teacher representation in each project school. The use of other professionals, including educational psychologists, nurses, and social workers, was also involved in British programs to various degrees, dependent upon the arrangements made by the local educational and health authorities.

Deployment of personnel in Canada appeared similar to Britain's, in that classroom teachers were cited as administrators of most screening procedures, with varying involvement from nurses, speech pathologists, and psychologists. The data indicated that Nova Scotia and British Columbia were among the few provinces with developed in-service for intervention. In addition, teachers were involved in the initiation of intervention programs in British Columbia, but the extent of decision-making participation was not known. In the preliminary surveys, none of the other provinces reported teacher involvement beyond execution of screening tasks.

In the United States, a variety of key personnel were reported to be involved at some level, with most boards using more than one type. Classroom teachers were the largest group (57% of all 27 programs), followed by trained volunteers (44%), social workers (39%), nurses (31%), psychologists (26%), and speech therapists (26%).

Release of Information

A number of administrative considerations, some with major program implications, did not appear in the literature or were referred to only tangentially. One such area was the use of results, especially record-keeping and the accessibility/confidentiality of information to be gathered, stored, and disseminated. The critical questions include concerns regarding temporary informal screening notations becoming permanent school records; concerns regarding sensitive family and child histories stored with boards with inadequate provision for privacy; concerns regarding information-sharing between education, health, social services, employment, law enforcement, and government bodies; and concerns regarding implications of written consent for participation in research studies and education programs, and for general release of information.

Parent Involvement in Early Identification and Intervention Programs

One of the major differences separating American from British and Canadian organizational components was the use of parent/community participation in the initial screening and subsequent intervention. In programs from the three countries, a variety of roles were observed. In some cases parents were informed of the program and/or were requested to authorize participation. Parents were frequently asked to complete developmental questionnaires or participate in teacher-parent interviews

to supply such information. Some form of feedback was sometimes offered to parents on the results of screening, although surprisingly this was not a universal feature.

No British or Canadian study provided any vehicle for parent or community involvement beyond passive information-giving and/or receiving, coupled with occasional one-way instructions on how the home could assist in the child's learning process. Parent representatives were not involved at the planning stages, nor in the selection of identification techniques, intervention priorities, or evaluative methods.

In contrast, a number of American programs had instituted parent involvement components as one of the primary theoretical platforms for the development of screening and intervention. A number of interesting studies on the maintenance of intervention gains stressed not only the importance of factors such as continuity of educational supports and teacher traits of warmth and flexibility (Shipman, 1979), but also the extent of parent involvement (Gordon, 1969; Gray and Klaus, 1970; Levenstein, 1970; Palfrey, 1979; Shipman, 1979).

The study by Gordon, for example, observed that the effects of parents on their young children (as information givers, managers of the environment, models, and direct teachers) influenced child development in the school. He emphasized the importance of a strong supportive relationship between the home and the school, and stressed the following points: (1) attitudes towards school are learned primarily at home; (2) parents' self-esteem, attitudes towards school, expectations for success, and provision of experiences all influence child performance, attitudes, and self-esteem; (3) children learn best when home and school share in the educational experience; and (4) parents gain in self-esteem and feelings of competence when they see themselves able to teach their own children.

Several of the more prominent parent/community involvement programs were the Florida Education Program (Gordon), Mother-Child Home Intervention Program (Levenstein), and Milwaukee Project (Heber). Parent roles were not conceived as passive ones, and involvement included parents and others from the community as planners, screeners, and teachers in class and home-based programs. Several of the Head Start/Follow Through programs were directly accountable to the host community.

From the preliminary Canadian survey, it would appear that none of the provinces regarded parent/community involvement as an important

consideration, and accountability issues in general had rarely reached educationally related debate. Despite lack of acknowledgement on the part of provincial Ministries of Education, however, there seemed to be a growing emphasis upon substantive community/consumer involvement, as expressed in a number of Canadian parent lobby groups. Participatory workshops had recently been developed to train parents to monitor the quality of social service and educational programs. Additionally, a series of conferences and symposia hosted by a number of organized parents' groups at national and provincial levels have started to examine problematic interrelationships between parents and professionals, with a view to monitoring effects of programs and consolidating efforts to ensure that children's needs are met.

MAINTENANCE OF EARLY IDENTIFICATION AND INTERVENTION PROGRAMS

Costs

One area of importance to planning is the cost involved in facilitating community involvement, procedure selection, in-service and volunteer training, evaluative methods, materials and curricular purchases, and intervention programming and maintenance. It was frequently assumed or implied in the literature that prevention was cost effective or cost efficient and that early intervention would use more efficiently the larger expenditure now allocated to remedial and special education programs. References were occasionally made to cost-conscious (inexpensive) methods of conducting screening, and to effective utilization of retrained personnel, but the more global questions of actual cost and cost effectiveness were not analysed.

Number of Personnel and Amount of Time Involved in Early Identification Procedures

Information was not available from the literature regarding the number of personnel and amount of time per student involved in early identification programs.

In-Service Training

Unlike Britain and Canada, nearly all of the American programs surveyed emphasized the necessity of in-service training for personnel applying screening techniques. Methods of in-service included workshops, lectures, seminars, films, videotapes, and demonstration projects, all used to

familiarize personnel with the goals and objectives of screening materials.

Evaluation

Evaluation methodology rarely appeared in the early identification literature, and the efficacy of specific screening and intervention programs was not always known, was in dispute, was in an experimental stage, or was ignored. Reference to monitoring did appear in programs from all three countries, but no particular problems emerged. Some programs equated evaluation with the ongoing informal screening of children's progress in skill acquisition, but rarely suggested ongoing informal monitoring of teachers' and administrators' progress in effective utilization of identification and development of intervention.

More global evaluation questions have been posed and can offer useful criteria in assessing the value of programs being initiated. In a recent address, for example, Palfrey (1979) offered a full discussion of Frankenburg's proposed program evaluation, as it might be applied to screening and identification. Shipman (1979) also addressed critical evaluative problems, as did Sumner (1979). As yet, there appear to be no Canadian programs that have been able to meet or even examine the major criteria discussed in the research.

6 Recommendations

- 8
1. That the Ministry of Education and the Ontario boards operating elementary schools explicitly adopt the practice of developmental review of all children at or about entry to the school system, in order to provide teachers with information useful in programming for, and teaching, new entrants. This would involve:
 - the replacement of the terms "early identification" and "early intervention" by the terms "early developmental review" and "early programming and teaching";
 - the replacement of a deficit emphasis, where such existed, by a general developmental emphasis, within which both adequacies and inadequacies of children's functioning could be ascertained;
 - the development of current single-stage "identification" procedures into two-stage review procedures, the first stage being a survey of *all* students, and the second a more detailed investigative assessment of children showing exceptional functioning, including both below- and above-average functioning;
 - the development, where necessary, at both stages of identification programs from the single interview, testing, or observation to systematic, ongoing assessment, centring on classroom observation and involving specialists, if necessary. Initial assessment over several weeks should be followed by continuous assessment, especially through teacher observation, but involving specialists where necessary. Emphasis should be laid on assessing the child as a learner, within a classroom milieu, interacting with all aspects of that milieu - teacher(s), other children, curriculum, materials, and setting. Results of assessment should be in usable and educationally relevant terms, not in categorical labels; they should be used as guidelines to teaching,

and not as predictors of future performance;

- the development of an emphasis on the earliest possible start to developmental review procedures, probably no later than shortly after kindergarten entry, in order to provide teachers with early guidelines to children's characteristics and to programming for them.

2. That school boards begin immediately to express the contribution that parents of school entry children can make to early developmental review. This should involve the establishment of parent-teacher, parent-counsellant, or parent-administrator discussion groups, workshops, and the like, possibly at both system and individual school level. Boards should investigate the use of parents as co-assessors in the individual case and as co-planners in general, and indeed any other role, going well beyond the typical limiting and occasional use of parents solely as informants about the child's background.
3. That school boards, in collaboration with the Ministry of Education (see recommendation 4), institute a greatly increased and systematic in-service training program in early developmental and review work for all teachers, consultants, and related personnel engaged in that work; these programs should focus especially on rationales, criteria for selection of assessment and programming techniques and measures, interpretation of results, and monitoring procedures. Teachers and consultants, especially the former, should be trained, not only in the implementation of early developmental review work, but in the planning and selection of system-wide procedures.
4. That the Ministry of Education adopt an active leadership role, building upon and going beyond past and present initiatives by establishing immediately a Task Force, to sponsor and guide the development and implementation of early developmental review work in Ontario.

Structure of Task Force

The Task Force would consist of two bodies:

- a) An Executive Group, composed of five or six people, working full time or nearly full time, chosen from Ministry of Education personnel and/or seconded from the field;
- b) An Advisory Group, composed of up to fifteen people, working on at least a half-time basis, chosen by the Executive Group from people

with practical and/or theoretical knowledge of early developmental review (of abilities) and/or early identification (of "disabilities"). The Advisory Group would be selected as quickly as possible, from Ministry of Education personnel (especially Curriculum, Elementary Education, Teacher Education, Special Education, and Research and Evaluation staff), faculty of academic institutions, and school board personnel.

Functions of Task Force

Orientation Program

The task force would establish an Orientation Program for personnel involved in early developmental review and early identification work, primarily in elementary school boards, but also in Ministry of Education Regional Offices, and academic institutions involved in the training of early childhood educators. This program would run for a period of 3 or 4 months.

The Advisory Group would be responsible for the carrying out of the Orientation Program and reporting on it to the Executive Group, in two main stages, as follows:

Curriculum Guide. The Advisory Group would develop immediately a curriculum guide for use in the workshops described below. This would include theoretical and practical rationales for early developmental review, and a two-stage process; criteria for choosing techniques and instruments for assessing children and programming for them; characteristics to be assessed; and in-service ideas for training teachers. A draft curriculum guide would be reviewed by a variety of specialists in the field of early developmental review and identification, and revised before being used in the workshops. Further revision and development would occur as a result of discussion, suggestion, and evaluation made by workshop participants. The curriculum guide would build on strengths of school boards identified in the survey described in this report, and attempt to compensate for weaknesses.

Workshops. Boards would be asked to nominate two or three representatives centrally involved in early developmental or identification work, no matter at what stage or in what mode the actual procedures might be. Ministry of Education Regional Offices and academic institutions (faculties of education, university departments, community colleges) concerned with

the training of early childhood educators would be invited to nominate representatives. They would attend one-week Orientation Workshops held throughout Ontario, conducted by members of the Advisory Board and invited local specialists in early developmental review and identification work. The content of the workshops would derive from the curriculum guide prepared by the Advisory Group. The focus would be on the selection, application, and evaluation of procedures appropriate to local situations, with the different contributions of the various types of participants being addressed.

Consultant Program

The Task Force would establish a supportive Consultant Program for elementary school boards to run throughout a school year. The advisory Group would be responsible for the carrying out of the Consultant Program, and reporting on it to the Executive Group.

The Consultant Program would be supportive, not directive, in that it would attempt to fit into existing, developing, or projected procedures, including in-service training, arranged by school boards. As board representatives completed the Orientation Program, they would be able to make use of consultant help from members of the Advisory Group in the following two stages of their establishment of early developmental review procedures:

- a) Establishment by boards of procedures, that is, to assist in all aspects of boards' early developmental review programs, in establishing new aspects, adapting already existing aspects, in choosing materials for assessing or programming, and above all in training teachers in in-service workshops.
- b) To assist in reviewing and monitoring the systems established by boards, in making adaptations, continuing in-service training for teachers, and in developing any new procedures such as parent education workshops, suggested by boards.

Evaluation Program

The Task Force would establish an Evaluation Program for all its activities, to begin as soon as the Executive Group is formed, and to be completed by a report. Objectivity would best be served by the appointment of a small evaluative group, probably on a research contract basis; formative evaluation arrangements would be made to provide regular and frequent

input to the Task Force; a final summative evaluation should be provided in a report covering all aspects of the work initiated by the Task Force.

Ministry of Education Support for Task Force

The Ministry of Education should be prepared to support the Task Force's leadership role, for example, in freeing Ministry personnel to undertake full-time or nearly full-time work in the areas outlined above, and in underwriting some of the costs involved; for example, in some expenses for workshops, evaluation procedures, and the secondment of some specialist assistance.

Nature of Leadership Role of Task Force

The Task Force should make every effort to ensure that its role is seen as leadership and development of previous Ministry initiatives in the early review and identification area and not as control of how school boards implement their procedures.

- The Task Force should be active and authoritative but not authoritarian and demanding. School boards have to attend to their own unique needs, resources, and stage of development in early review and identification work, but without ignoring the benefits of specialist and outside expertise. No recommendation is made regarding the creation of special mechanisms to maintain the balance between the different emphases of Ministry and boards; rather, it is suggested that the Consultant and Evaluation Programs pay constant attention to this sensitive area, using orientation workshops and discussion and information sessions to maintain both the fact and spirit of cooperation. It is also suggested, however, that the Task Force, in being alert to this issue, be prepared to develop procedures and arrangements in conjunction with one board or several, to devise solutions to local problems.

- The Task Force should emphasize that it is a temporary provision, of some two years' duration. Both the Orientation and Consultant Programs are timed to relate to the establishment of, preparation for, and trying out of, fully developed board programs, while the Evaluation Program begins with the appointment of the Executive Group and ends with the completion of its work.

5. That the Ministry of Education should begin discussions with school boards, possibly through a second advisory group, regarding the

establishment of regular and systematic developmental reviews of children throughout their school careers. Early developmental review is not intended to be predictive, but a guide to the teaching of children in the immediate and near future. It should be followed by regular system-wide reviews, of a two-stage type, with the same purpose. Such reviews would add breadth and depth to current procedures such as completion of Ontario School Records.

6. The Ministry of Education should begin discussions immediately with faculties of education regarding the addition to their programs of courses, or equivalent components, in the principles and practice of early developmental review. These discussions should also address the possibility of credit or certification being given to teachers in training in this area as a result of such courses.
7. The Ministry of Education should begin discussions immediately with the Ministry of Health to establish, perhaps through a junior committee, means of ensuring closer, more systematic ties between school boards and Public Health Units. Guidelines (following the best current practice) should be quickly established for school boards to use in acquiring screening information from Public Health Units and fitting it into their own early developmental review procedures.
8. That the Ministry of Education should begin consultation immediately with the Ministry of Community and Social Services, community college and university departments involved in training teachers in early childhood education, and field representatives, with a view to establishing a joint committee to explore the possibility of closer formal contacts between school systems and pre-school provision, such as daycare. The expertise of workers in early childhood education has rarely been utilized by the school system when children enter it and the joint committee should give priority to developing guidelines for school boards for gathering information from daycare centres and related provisions.

Appendix 1

SURVEY OF PROCEDURES FOR EARLY IDENTIFICATION OF CHILDREN'S LEARNING ABILITIES AND OF INTERVENTION PROGRAMS IN THE PROVINCE OF ONTARIO

(Initial Questionnaire)

1. Do you have a program for the early identification of children's learning abilities?

Yes (when started _____) No ☐

2. If "No" to Question 1

A. Are the main reasons

- (a) fiscal? ☐
(b) lack of personnel? ☐
(c) ethical-philosophical considerations, e.g., possible negative effects, self-fulfilling prophecy? ☐
(d) other? Please specify _____ ☐

B. Is your Board planning to implement such a program by September, 1979?

Yes ☐ No ☐

3. If you have, or anticipate introducing, an early identification program

A. When do you try to identify the children?

	<u>Fall</u>	<u>Spring</u>	<u>Both</u>	<u>As Requested</u>
(a) pre-school	☐	☐	☐	☐
(b) junior kindergarten	☐	☐	☐	☐
(c) senior kindergarten	☐	☐	☐	☐
(d) grade 1	☐	☐	☐	☐

B. Is it

- (a) a general screening? e.g., of all age groups(s) or grade level(s) ☐

(b) an individual assessment of children?

If so, is source of referral

- (i) parent? ☐
(ii) teacher? ☐
(iii) both? ☐
(iv) other? (Please specify) _____ ☐

(c) both general screening and individual assessment? ☐

(If so, please fill in source of referral for individual assessment above)

C. Do you use

(a) standardized tests? (Please specify) _____ ☐

(b) informal tests? (Please specify) _____ ☐

D. If tests are used, are they administered by

- (a) psychologists? ☐
(b) teachers? ☐
(c) others? (Please specify) _____ ☐

E. What aspects of performance are measured/described in your identification program?

- (a) general developmental ☐
(b) behavioural ☐
(c) sensory ☐
(d) cognitive ☐
(e) perceptual { visual ☐
 { auditory ☐
 { fine ☐
(f) motor { gross ☐
 { receptive ☐
 { expressive ☐
(g) language ☐
(h) speech ☐

F. In general, what ratio of boys to girls emerges from your identification program?

(a) equal

☐

(b) more girls than boys

☐

(c) more boys than girls

☐

4. What intervention procedures do you use based on the results of the early identification program? (Please indicate, where applicable, when you began to use a procedure.)

(a) a published intervention program specifically associated with the identification measure(s) used

☐

Please specify _____

(b) a published intervention program other than (a) above

Please specify _____

☐

Selected by:

(i) teacher _____

(ii) other _____
Please specify

(c) a general intervention program devised by your board or by another board

☐

Please specify _____

(d) a teacher-devised program

☐

5. Does the intervention program take place in a

(a) regular classroom?

☐

(b) special class?

☐

(e) resource room?

☐

Appendix 2

SURVEY OF PROCEDURES FOR EARLY IDENTIFICATION OF CHILDREN'S LEARNING ABILITIES AND OF INTERVENTION PROGRAMS IN THE PROVINCE OF ONTARIO

(Detailed Questionnaire)

1. What factors contributed to your establishment of an early identification program? (fiscal, mandatory children's needs)

2. Does your program focus on
 - (a) the identification of potential problems?

 - (b) the identification of general and specific abilities?

 - (c) both (a) and (b)? (How does it do (a), (b), (c)?)

3. What were/are the goals of your identification program?
 - (a) in the short term?

 - (b) in the long term?

4. What criteria did you use to select your identification procedures/instruments? (Who did the selection? Why those particular procedures?)

5. What kinds of information do you hope to obtain from your identification program? Please indicate for each kind of information what specific test instrument(s) or approach you use to obtain that information.

(Components of the ID procedure and emphasis. End with a summary statement of what they've said: "Your approach consists of tests 1, 2, 3 . . . to measure . . . plus T. observation to . . . get at 'weighting' given to T. observation")

6. (a) Do you have procedures for evaluating the validity of your identification program? If so, please describe.

(Are early ID data correlated with later achievement data? If yes, what measures are used to obtain achievement data and at what stage?

- (b) If the program has already been evaluated, what were the findings? Documents would be particularly helpful, please.

(How evaluated? What modifications, if any, on basis of results?)

7. To whom are the results of the identification program released?

Teachers? _____ Parents? _____ Other professionals? _____
Please specify _____

8. Do the results of the identification procedure typically lead to

- (a) referrals?

If so,

- (i) to whom within the board?

- (ii) to whom external to the board?

(b) placement decisions? Please describe.

(c) general curricular decisions? Please describe.
(i.e., affecting programming for a whole grade level)

(d) an intervention program for particular children? Please describe.
(Who prescribes? Who monitors? Are "ident." children referred to an already existing program or are results used to plan a specific program for each child?)

9. What criteria did you use to select your intervention procedures?
(Why these? Who selected?)

10. What are your criteria for instituting an intervention program for a particular child(ren)?
(How is his/her profile of abilities taken into account?)

11. Do you begin intervention immediately or is the child kept under observation for a period of time?

12. How long would an intervention program typically continue as a result of your identification program?
(i.e., is the follow-up short-term or long-term?)

13. What percentage of the children who participate in the identification procedures have an intervention program? _____

What percentage of children selected for an intervention program have it

(a) in a regular classroom? (%)

(b) in a special education setting? (%)

(c) in a resource room/withdrawal situation? (%)

14. Do you have procedures for monitoring and evaluating your intervention program?

If so,

(a) how is this done?

(b) at what point(s)?

(c) by whom?

15. What kind of changes in the general curriculum have been made as a result of your identification program?

16. What is the teacher's role in

(a) the selection of identification procedures/instruments?

(b) the implementation of the identification program?

(c) the implementation of the intervention procedures?

17. Where teacher's observation is indicated as one of your identification procedures, what training do you provide for the teacher(s)?
(What does the training entail? Formal, informal observation scales, etc. Ditto, giving tests?)

18. Do you provide in-service training for teachers in the implementation of an intervention program?

Yes _____

No _____

If "Yes," what does the training entail?

19. What in-classroom support (consultants, teacher-aides, curricular materials) is the teacher given to implement an intervention program?
(Programming advice, time to spend with individual children)
20. What is the role of other professionals in
(a) the identification program?
(Who? How?)

(b) the intervention program?
21. What is the role of parents in
(a) the identification program?

(b) the intervention program?
22. What is the cost per student to implement
(a) your identification program?

(b) your intervention program?
23. How much time is required per student for your identification procedure?

24. How many people are involved in implementing
- (a) your identification program?
 - (b) your intervention program?
(Who are they?)
25. How do you see the school curriculum differing in the long-term/
short-term because of your identification program?
26. What do you see as the implications of your identification
program for
- (a) in-service training for teachers and consultants?
 - (b) parent education?
 - (c) Special Education placement?
27. How important do you feel it is to identify children's learning
abilities early?

Appendix 3

IDENTIFICATION PROCEDURES PLANNED OR PILOTED

Windsor Early Identification Project

The project, or the modified versions of it suggested by the five boards, began at pre-kindergarten registration at the beginning of September with the beginning of school being delayed for kindergarten children for this purpose. The parent and child went to the school by appointment, for parent interview and educational assessment. Social history was completed by the parent(s) with school personnel, often the school secretary, and sometimes the kindergarten teacher. The parent(s) usually completed the Health History Form in a private parent-teacher interview. The child was then given the educational assessment, usually without the parent(s) being present, in the areas of knowledge of colour, receptive and expressive language, auditory association, and mathematical skills. On the basis of teacher observation during the regular classroom program up to the end of October, each child was rated on behavioural characteristics on the dimensions of self-esteem, attention span, social adjustment, and passivity/overactivity.

Modifications to these procedures were made by two boards. One board omitted the behavioural section because it considered this teacher-observation component to be too subjective. The other board had made extensive changes to the original Windsor Early Identification Project materials in that items measuring gross and fine motor development, symbol recognition and recall, and social and emotional development had been added to the original form. In addition, auditory discrimination had replaced auditory association. There also were a number of changes in the items used to measure mathematical knowledge and receptive and expressive language.

Varied Procedures

1. A social and medical history was already obtained through the Public Health Unit in addition to screening of vision and hearing and the administration of the Denver Developmental Screening Test. Teacher observation during the kindergarten year was being planned, resulting in individual profiles of each child three times in the year to

coincide with the reporting to parents. Observations were to be guided by a checklist assessing social, emotional, physical, intellectual, and creative development, which was devised by the kindergarten teachers. In addition, the metropolitan reading readiness test would be administered in the spring of kindergarten. This procedure was in the planning stage.

2. Information was to be utilized from the social history and medical history and Denver results presently obtained by the Public Health Unit. Continuous classroom observation would be conducted by the kindergarten teacher using a kindergarten checklist (still being developed by the primary consultant and special services consultant with teacher feedback) assessing the areas of gross motor functioning, visual motor functioning, auditory discrimination, language, number understanding, and reasoning. Speech would be assessed as required by a speech pathologist. This procedure was in the planning stage.
3. In addition to present Public Health Unit information including the Denver Developmental Screening Test results, the system was planning to use the Windsor Early Identification Project, together with the health histories form, as the basis for a parent-teacher interview. An educational assessment had not yet been selected but the board wished to assess cognitive (individual language), affective, and motor development. It hoped also to include in its procedures an initial teacher-pupil interview either at a pre-school or early school stage, together with teacher observation through the year. This procedure was in the planning stage.
4. This board was using Public Health Unit information and information gained at a parent-teacher interview at the beginning of September, through a Developmental Profile; this was a checklist developed by teachers and curriculum and psychoeducational consultants, to assess socio-emotional, language, cognitive, and physical (gross and fine motor) development. This Developmental Profile would be used by kindergarten teachers to provide an individual profile of each child two or three times each year during junior and senior kindergarten years, to coincide with reporting to parents. This procedure was in a pilot stage.
5. In one other board, both Public Health Unit information and a developmental checklist for program planning at the kindergarten

level were available. The latter could be used as the basis for teacher observation, initially during the month of September of junior kindergarten and then three times each year throughout junior and senior kindergarten, to coincide with reporting to parents. The areas assessed were physical (gross and fine motor) development, communication, and general concepts (including number, colour). This procedure was available but not mandatory.

6. One board uses the Windsor Early Identification Project and has currently implemented these procedures in nine of its forty-six elementary schools, that is, to approximately 20% of its kindergarten children. Information is collected during the first week of September and admission is delayed for kindergarten children for this purpose. Initial screening of vision and hearing information is collected by Public Health Unit personnel; the Windsor Early Identification Project Social and Health History forms are completed by the parent(s) with assistance from school personnel, such as the school secretary and during an interview with the teacher; a speech screening (an articulation test) is conducted by a speech therapist; and the complete Windsor Early Identification Project educational assessment is done. The Windsor behaviour assessment is completed by kindergarten teachers based on three months of classroom observation. In addition, there is an effort to identify gifted children early by means of a questionnaire to parents, initial testing, and classroom observation.
7. One board has devised its own procedures and instruments which it is presently implementing with approximately 20% of the kindergarten children in its system, at pre-kindergarten registration in the spring prior to kindergarten entrance. Social and health history forms are completed by the parent(s) and school personnel, such as the secretary, principal, or kindergarten teacher. In June, prior to kindergarten, home visits are made by the kindergarten teacher, at which general cognitive information is collected. After four to six weeks in school, the kindergarten teachers complete developmental profiles in psychomotor, cognitive, and affective areas for every child. In addition, there is ongoing classroom observation by the kindergarten teachers throughout the school year.
8. Another of the boards developed its own instrument and procedures and is currently using them to assess approximately 50% of its

kindergarten children. A social history survey is completed at a teacher-parent interview during kindergarten registration in the spring prior to kindergarten. During September, over several sessions in a normal kindergarten setting, each child's development is assessed in the areas of mathematics, behaviour, fine and gross motor development, visual perception, and receptive and expressive language. This assessment is carried out by a kindergarten teacher or an early identification and programming project teacher using a survey format for all of the children. A detailed format, assessing the same areas of development, is subsequently used for children about whom additional information is required.

During April and May of the kindergarten year, the kindergarten teacher or a teacher's aide administers selected subtests of the early identification survey which was used during September, in addition to the Gates-MacGinitie Readiness Test.

9. Finally, one of the boards is in the process of changing its early identification program. It is presently planning and/or piloting procedures to be administered at the end of kindergarten, in the areas of self-concept, behaviour, attention span, language and skill development, that is, rate of learning.

Appendix 4

TIMING OF EARLY IDENTIFICATION PROCEDURES

The timing used by the thirteen boards with developed identification procedures was as follows:

1. Those which implemented all of their procedures during the spring preceding kindergarten admission (1 board). Only one board implemented all of its early identification procedures during spring at kindergarten registration. The child and parent(s) arrived by appointment, and were passed through six centres, four health (i.e., health history, vision, hearing, nutrition) and two academic (cognitive, family history). A play centre was provided for the children. The assessment was carried out by a team composed of Public Health Unit personnel, the school's kindergarten teachers, and a Methods and Materials Resource Teacher. The primary supervisor coordinated the program over the whole system.
2. Those which implemented some of their procedures during the spring before kindergarten and not during the kindergarten year(s) (6 boards).
 - (a) (2 boards) One board completed social and health history forms with the parents in an interview at spring registration, by appointment. Throughout the two kindergarten years, there was formalized, ongoing assessment focussing on the activities of the kindergarten program. These were described as language, listening activities, number, science, creative activities, and social and emotional development using the Education Assessment Evaluation Guide developed by the board in collaboration with Dr. Chris Nash of OISE. Each child was profiled three times in each kindergarten year to coincide with reports to parents.

The other board began its early identification procedures at pre-kindergarten registration with a parent-teacher interview, and an academic assessment of socio-emotional, language, cognitive, perceptual-motor, and sensory-motor development, using the pre-kindergarten inventory kit developed by the board. During the kindergarten year, the child's progress was followed through teacher observation using a kindergarten pupil evaluation form, developed by the board.

(b) (2 boards) One board completed kindergarten information forms on social and health histories and communication with parents on the objectives of the kindergarten program during a parent interview at spring pre-kindergarten registration. The board completed its assessment during October of the kindergarten year on the basis of classroom and playground observation of each child by two kindergarten teachers during the first four to six weeks of school. The teachers collaborated in completing, for each child, a socio-emotional behaviour form and a screening inventory, which assessed development in language, perceptual-motor, sensory-motor, and auditory memory, together with concepts (colour, number, and shape). This information was transposed by the primary consultants into individual and class profiles which were discussed with teachers.

Only 2 of the 6 selected boards have currently implemented their early identification procedures throughout their whole system. One of these is the Windsor Early Identification Project.

(c) (2 boards) At spring pre-kindergarten registration, one board filled in a general health information form with the parents, and assessed all the children on gross-motor development, expressive language, and auditory perception using the Windsor Early Identification Project for the latter two areas. Assessment was completed towards the end of kindergarten, typically in May, by administering to all the children a visual perception test and the Metropolitan Reading Readiness Test.

The other board used a combination of standardized informal tests and teacher observation. Vision and hearing information was collected by the Public Health Unit as part of their pre-kindergarten registration procedures. The school-administered section of the program took place at the end of the kindergarten year and included the gathering of information on social, personal, and self-care development; academic readiness, that is, letter and number knowledge and recognition; tests of visual and auditory memory, visual and auditory dissemination, and intelligence. This information was collected primarily by the teachers with help from one other person such as a school secretary or a grade 8 student. In addition, the kindergarten teachers were asked for a judgment of each child's future success or failure in grade 1.

3. Those which implemented all their procedures during the kindergarten year (5 boards). Three of the boards used the Medvedeff programs. After four to six weeks in school, kindergarten teachers were asked to rate each child in the class on a three-point scale: 1) if in the teacher's judgment the child would not have learning problems during his/her academic career; 2) if the teacher was uncertain about his/her academic future; and 3) if the teacher thought that he/she was having or would have future learning difficulties. The children rated as 3 were assessed by the teacher, using the Medvedeff Early Identification Screening Inventory. In the case of any child who had a positive checkmark on more than 7 of the 100 items, a further three inventories were completed by the teacher, namely, the Fine Visual-Motor Screening Inventory (FVMSI), the Perceptual Organization Screening Inventory (POSI), and the Motor-Perceptual Diagnostic Inventory (MPDI). Children rated as 2 were observed for a further four to six weeks and then rerated.

One board asked the kindergarten teachers to rank order the children, after observing how they functioned for two months in kindergarten, with regard to their likely ability to master the core curriculum - i.e., reading and mathematics - in grade 1 and beyond. The kindergarten teachers then administered the Myklebust Pupil Rating Scale to children they nominated as "at risk." This was followed up, where required, by diagnostic testing by special service personnel.

The other board had informal teacher observation of physical, social-emotional, and learning readiness throughout the kindergarten year. Speech and language development were assessed at the end of kindergarten, with any informal testing requested by a kindergarten teacher being conducted by the school special education teacher.

4. Those which implemented some procedures at pre-junior kindergarten and the rest at the beginning of grade 1 (1 board). This board filled in social and health history forms with parents during pre-junior kindergarten registration. Its assessment was implemented during the fall term of grade 1, using teacher observation and various standardized and informal tests administered by psycho-educational consultants. These tests were selected on the basis of characteristics and needs of the school population as perceived by grade 1 teachers, principals, and primary psychoeducational con-

sultants. The general areas assessed were social-emotional, sensory, perceptual, expressive language, and cognitive development. The information was put together by a psychoeducational consultant and discussed with the teacher and principal.

Appendix 5

BOARDS INDICATING GENERAL CURRICULAR CHANGE AS THE RESULT OF EARLY IDENTIFICATION PROCEDURES

Boards with Kindergarten Teachers Teaching to Weaknesses But Ignoring Strengths Revealed by Screening (2 boards)

- Teachers used the results of a screening checklist to modify or redesign curriculum, for example, they did not teach colours if the children already knew them. If expressive language were weak, teachers might build a heavier component into the program. In one school which found a general lack of gross motor ability, this was given increased emphasis in the regular program.
- A concentrated effort had been made to improve oral language as this had tended to emerge as weak, relative to other skills assessed in the early identification process.

Boards Declaring Incorporation into Kindergarten Programs of Identification Areas or Items, or of New Emphases Deriving from Them (5 boards)

- The position of 2 boards was illustrated by the example of one. Test items had led to teachers placing a new emphasis on some parts of their program, for example, gross motor assessment had led to a daily gym period for kindergarten children; printed language assessment had led to books sent home weekly with every child. In addition, there was better accommodation made for individual needs.
- Similarly, in the 3 boards using the Medvedeff procedures, there had been a tendency for parts of the Medvedeff intervention program to be implemented in the regular program for all children as follows: The gross motor part of the Medvedeff intervention procedure was given to all kindergarten children for thirty minutes per day together with other parts of the intervention program (unspecified), to become part of the kindergarten program. Another Medvedeff board indicated increased gross motor activity in kindergarten programs, with teachers placing more emphasis on "making things," an important element in the Medvedeff intervention program. In addition, the Medvedeff identification program had "made teachers more aware of the important things to look for." The third Medvedeff board had incorporated certain aspects of the Medvedeff

"complete child" program into the regular kindergarten program. Board personnel were presently developing mathematical, pictorial, and symbolic experiences as prerequisites for formal instruction in mathematics and language.

Boards Giving General Affirmative Statements (3 boards)

- Teachers adjusted their program to strengths or weaknesses revealed by screening.
- Programs were adjusted to meet individual needs.
- The results of screening were used as a guide for grouping children and planning specific programs based on the skills described in a kindergarten curriculum guideline developed by board personnel.

Boards with a Formalized Procedure for Using Screening Results as a Guide to Planning Programs (3 boards)

- One board used early identification data for system level, school level, and child level program design. At a system level, decisions were made each year following screening procedures by superintendents and primary supervisory personnel. Thus, the board found from screening that some children needed more large muscle activity, and so designed a daily physical education program for kindergarten children to be used throughout the system. Similar system-wide programs designed by the board were a Mathematics Concepts Development Program and Play Education Centres.

At school and individual child level, primary supervisors met with principals, kindergarten teachers, and resource teachers to discuss kindergarten program needs and emphases for the coming year on the basis of screening results. Discussions involved analysing individual profiles and planning programs and placement of equipment. Examples of school-level decisions were the scheduling of gymnasium use for kindergarten children, talk time for language development, and activity time for social skills development.

- One board stated that general curricular decisions were built into the procedures. A psychoeducational consultant put together all the information from screening on each child and then sat down with the grade 1 teacher to discuss curriculum plans for different children or groups of children. For children at mild risk, some modifications of the basic program might be jointly arrived at. Children in a class showing

similar needs might be grouped for supportive help in a particular area. A curriculum expert in primary programming was frequently asked to assist in planning appropriate curriculum for children, based on the psychological data derived from the screening.

- A third board said that organization of curriculum was based on initial assessment results. Curriculum planning was done by the kindergarten teacher with help from a primary consultant. The board's goals for programming for young children had been more clearly defined as a result of the early identification program. For example, academic expectations for immature children in grade 1 were being reduced, recognition of the needs of gifted children was increasing, as was the recognition of problems of initiating reading and abstract paper-and-pencil activities, and more activity-centred programs were being introduced at the grade 1 level.

Boards Not Distinguishing between General Curriculum Decisions and Programming for Specific Children (3 boards)

- The main component of one board's early identification procedures was an ongoing assessment or monitoring of each child's development throughout junior and senior kindergarten. This was done by teacher observation based on an evaluation guide, developed by kindergarten teachers with primary consultants and Dr. Chris Nash of OISE. Junior and senior kindergarten programs had been planned to permit individualization of the learning situation. Interest centres were the heart of the program and children chose the activity they wished to pursue and the amount of time they wanted to pursue it. An evaluation guide required individual assessment and an instructional approach which attempted to match the program to the child and not vice versa. Because of this general philosophy of the kindergarten programs, it was easy to build in intervention for a particular child. In addition, this board had implemented a system-wide Life Needs Program for educable retarded children, using two itinerant special education teachers.

- Another board did not distinguish between intervention for an individual child and general curriculum decisions because it had an individualized approach to instruction with programming based on individual needs, learning styles, and abilities. In this case, again, the point was made that the main thrust of the program was to make the curriculum fit the child and not vice versa.

The program used an ongoing observation following a curriculum guide, developed by board personnel, which had three components - observe, plan, and evaluate - and was a resource for teachers for programming. The materials could be used to program for each behaviour on the screening checklist with a strong emphasis in kindergarten programming on experience and manipulation.

- The third board pointed out that results were typically used to plan specific programs for each child in kindergarten with an emphasis on teachers using the results of identification with consultative support. Identification assessment gave information pinpointing areas for teaching on an individual basis, and the board thought that identification procedures had led to more appropriate individualization of programs. The emphasis in the kindergarten program was on activity centre learning.

Appendix 6

INTERVENTION FOR INDIVIDUAL CHILDREN AS A RESULT OF EARLY IDENTIFICATION PROCEDURES

Boards with No Formalized Intervention Procedures (8 boards)

- One board did not provide a "package" program in kindergarten but would like to give teachers help in the form of support, advice, and materials.
- Two boards pointed out that, since their main program goal was to identify children's needs and modify the program to meet them, they did expect to implement some kind of intervention procedure.
- One board, still at the planning stage, hoped to have intervention procedures.
- One board indicated that, although there was no system-wide intervention program, teachers might informally consult primary consultants and school resource teachers.
- One board had no formal intervention package at the moment, although they were in the process of forming a committee of kindergarten and grade 1 teachers, resource teachers, and principals to develop a package or kit of materials to be used by teachers.
- One board gave assistance to children on a withdrawal basis during grade 1 but during kindergarten wanted a general thrust with supportive materials for individual children.
- One board, at the piloting stage in early identification procedures, using the Windsor Early Identification Project, was still planning intervention procedures; it wanted to focus on children's needs in perception, mathematical knowledge, and expressive and receptive language. This would involve the development of activity centres by teachers. Resource teachers had already compiled a booklet giving suggestions on activities in these areas.

Boards with Intervention Mainly the Responsibility of Teachers, with Support Available (6 boards)

The following details were given by some of these 6 boards:

- Four boards stated that kindergarten teachers were responsible for monitoring children and organizing and modifying their programs to accommodate children's needs, but that they could receive help in the form

of advice and materials from curriculum and special services departments. Some variants were:

- a) One board had additional support for teachers in the form of a resource book of ideas, help from teacher-aides and volunteers for severe cases, and assistance from a speech therapist who set up and monitored speech and language programs.
 - b) One board mentioned the availability of intervention programs carried out by speech therapists.
 - c) One board had developed ways to help teachers, for example, having specially trained teachers withdraw children in small groups in grade 1 for lessons on a daily basis, or at least three times each week for half-hour periods. Further assistance was provided through speech correction teachers, remedial reading teachers, and parents and volunteers.
- In two boards results were typically used to plan specific programs for each child. The emphasis was on the teacher using the early identification results with consultative advice.

Boards with Formalized Procedures for Obtaining Support for Classroom Teachers in Implementing Intervention (5 boards)

- One board was piloting a procedure in which the results of early identification, with regard to each child, were discussed by the teacher and primary consultant who jointly devised an appropriate program. This consultative model had three phases intended to bring direct service to the teacher for teacher-referred problems, an assessment phase, an intervention phase, and a follow-up phase, with steps in the procedure clearly specified for each phase.
- One board used a similar procedure in which discussion and planning were done by the teacher and a psychoeducational consultant, with a curriculum consultant and/or other resource personnel included when required. This board also had some system-wide intervention programs, particularly in motor development and language enrichment.
- One board used school prescriptive teams which met weekly to discuss and devise intervention programs for children nominated for discussion by the teacher, principal, resource teacher, or parent. The program was carried out by the teacher with support from the school resource teacher, except in the case of speech intervention, for which a speech pathologist was available if required.

- In one board, modifications in the regular program were decided on by the teacher and consultant in accordance with each child's stage of intellectual, physical, and social development. As part of an early intervention project, several resource packages had been prepared by the board, consisting of listening tapes, listening activities and extended book activities, and ideas for extending spoken language.

- In one board, the emphasis by school psychologists, when they reported the results of early identification procedures to teachers by means of child profiles, was to provide guidelines for instruction. The teacher also received support from primary resource consultants and special education and reading departments or curriculum specialists. A specific intervention program would be instituted only after a child had further individual assessment.

*Boards with a System-wide Use of Published Intervention Materials
(4 boards)*

- Three boards were using a published intervention program specifically associated with the identification procedures they had adopted, namely, the Medvedeff materials.

- One board intended to use a combination of a published program, namely, DISTAR, and a board-devised intervention procedure. The latter, a mastery learning approach to reading instruction, was currently being developed together with a multidisciplinary methods approach, TEAMS, which was an accumulation of all methods presently used by language, learning resource, and guidance teachers, school psychologists, Public Health nurses, and ideas from local pediatricians.

Boards Involving Parents in Intervention (1 board)

In one board showing "high risk" in language, parents were encouraged to use school-supplied materials at home as an addition to school emphasis on language, using Language Master and listening centre approaches. If a child were having psychomotor difficulties, the parents were given advice and exercises to be used at home to add to the school emphasis on the psychomotor area.

Boards Offering a Pre-school Summer Program for "At Risk" Children, with Other Options Available (1 board)

One board had a four-week pre-school summer program for "at risk" children. In addition, a number of intervention options were available after

completion of kindergarten. Severe problems in speech, language development, or physical disability were referred to a local children's treatment centre for intervention. Less severe speech and language problems received weekly attention from speech correction teachers. Some children spent a second year at kindergarten level, with their time shared between kindergarten and a special education class, receiving individualized programs. Teacher aides often gave special education teachers and classroom teachers this extra individual help. Gifted and talented children were given enrichment programs and/or moved to groups where they could have enrichment.

Boards Making No Distinction between an Individual Intervention Program and General Curricular Change (2 boards)

- One board stated that it made no distinction between individualized programs for children and general curricular change, but did not develop the theme.
- In one board teacher observation, using an Evaluation Guide developed by Dr. Chris Nash of OISE, dictated to a large extent the content and organization of the program.

Appendix 7

SUMMARY POSITION ON INTERVENTION PROCEDURES BY BOARDS IN SELECTED SAMPLE

Criteria for Selection of General Intervention Procedures

1. a) Consistency with kindergarten program based on on-going observation of children in classroom activities (using Nash Evaluation Guide).
b) Use of multidisciplinary team and conference approach to discuss appropriate intervention programs.
2. Adjustment of regular program to individual child with resource teacher support through ideas on activities to help teacher do this. Multidisciplinary team approach to intervention decisions.
3. Use results of identification assessments at beginning of grade 1. Not looking for a system-wide package but for modifications of regular program. Decisions made by team conference.
4. Program planning and implementation primarily the responsibility of teachers. Procedures consistent with primary focus of kindergarten program on speech and language.
5. Referrals by teacher on basis of Early Identification Program of screening, including information from nurses, parents, and teacher observation of classroom performance.

Criteria for Selection of Individual Intervention Program

Decision based on teacher observation and use of Nash Evaluation Guide confirmed by primary consultant's classroom observations, and discussed by multidisciplinary team whose combined perceptions influence intervention procedures.

Multidisciplinary team provides programming ideas for individual child. Try to take into account child's previous background experiences when making any judgment about "weaknesses." Social-emotional problems with hearing- and vision-handicapped first priority. Take into account whole profile with information from teachers, parents, and nurses.

Professional judgment of team that there is a problem. Teams made up of teacher, psychoeducational consultant, and other curriculum specialists as required. Decision based on assessment results, including classroom observation.

"Single star or double star" in assessment procedures indicate children who might have difficulty adjusting to kindergarten program. Consultation with parents and teachers' classroom evaluation are also important factors

Problem areas indicated by screening procedures and teacher observations, and possibly parental requests for help for child.

6. Selection of procedures based on needs of child. Availability of materials (in French) and facility of usage of materials by teachers and parents is also a consideration. Team selection of procedures. Caution about over-hasty or premature intervention. Combined decision of team (teacher, principal, and special services personnel) that intervention is required.
7. Frustrated by previous procedures of standardized testing because information useful to teacher did not emerge; therefore returned to informal observation. Retention of diagnostic emphasis but not large-scale screening. Team decision approach. Conference procedure of two types:
(a) diagnostic consultation if intervention is of less serious nature which can be provided within school;
(b) case conference, if problem is serious and requires outside help, e.g., physical problems (hearing, vision, mobility), social or emotional immaturity, learning problems (intellectual or perceptual). Usually initiated when whatever modifications attempted by teacher have not worked. Child is nominated for discussion by school prescriptive team who plan an appropriate program.
8. Board decision to integrate special services into regular programming. Teachers, community, and administration developed a needs-based program with school prescriptive team as integral part.
9. Previously used paper-and-pencil tests gave lots of information but no transfer to kindergarten program. Wanted high emphasis on developing learning strategies, self-esteem, and kindergarten philosophy towards the development of children. Wanted to use combination of initial assessment information and ongoing classroom observation. Team approach to intervention decisions. Team decision, based on combination of what child can not do on checklist and information from ongoing classroom observation.
10. Wanted procedures which related to board's philosophy on educational experiences and provision for individual differences in young children. Team approach to decisions. Combination of initial screening on Windsor Early Identification materials and ongoing program planning and assessment of children by teacher. Additional classroom observation and testing by primary or special education services if required.
11. Wanted modifications of regular program, not a specific package attached directly to identification instruments. Team reviews child's performance and needs after assessment is completed.

12. No specific system-wide intervention procedures. Emphasizes teacher carrying out intervention procedures in regular classroom

Child's profile on Windsor Identification Project, including classroom observation by teacher, is basis for individual programs. Team is involved for consultation.

13. Needs of children identified by survey assessment procedures, followed by individual assessment of "problem" children. Multidisciplinary team approach to decision-making.

Appendix 8

PROCEDURES FOR MONITORING AND EVALUATION OF EARLY IDENTIFICATION AND INTERVENTION PROCEDURES

<i>How Is Monitoring and Evaluation Carried Out?</i>	<i>At What Point(s)?</i>	<i>By Whom?</i>
1. 6 boards: not applicable, still planning identification procedures.		
2. 3 boards: not yet implemented but able to specify plans as follows:		
a) classroom observation	3 times per year	teacher and consultant
b) - research studies of particular intervention procedures; - follow-up of "high risk" children, using computer-based intervention-reporting strategy	yearly, and when required during school year	Educational Research Services
c) - teacher report with support available through conference with primary consultant; and - formal assessment	not specified	teacher and primary consultant
3. 18 boards reported implemented procedures	ongoing	teacher and primary consultant, and support from principal
a) - ongoing monitoring built into regular program through use of Evaluation Guide (Nash) and primary development conference		
b) teachers' opinion in consultation with principal in preparation for teacher-parent interview	3 times per year (at report time)	teacher, with support from principal and primary consultant
c) - face validity by teachers, consultants, staff and parents through school visits by 3 consultants in system: - individual tests	approx. twice per month	teachers, consultants, principals, and parents
d) ongoing monitoring and adjustment of program to meet needs of children	at end of K year	
e) as in d)	ongoing	teacher and psychological consultant, teacher and resource teams (principal and consultative staff)

*How Is Monitoring and Evaluation
Carried Out?*

At What Point(s)

By Whom?

f) K pupil evaluation instrument designed to monitor program	October and May	teacher and consultant staff
g) - ongoing teacher observation and program planning monitored by primary support staff; - additional testing on request	ongoing	teachers and primary support staff; psychology dept.
h) - regular classroom visits - progress reports - standardized testing	monthly half-yearly end of year	remedial reading consultant remedial teacher or special education consultant remedial teacher or special education consultant
i) no formal evaluation of overall intervention program but class monitoring and evaluation of each child's program	ongoing	K teacher with support from review team (K teacher, principal, resource teachers)
j) reassessment of "at risk" children	spring	K teacher
k) no formalized system, but follow-up of individual children having intervention program	as required	teachers and consultants
l) regular monitoring of children nominated by teacher, parents, principal, or consultant staff	as required	school prescription team (classroom teacher, principal, and resource teachers)
m) teacher report on progress (Medvedeff program) of "at risk" children	end of K, and as required, and at end of grade 1	teacher
n) - reassessment of "at risk" children (Medvedeff program) - parent-teacher reports	end of year 3 times per year	teachers, parents, consultants
o) teacher keeps ongoing records on social, health, and general performance - retest on Medvedeff program of all "at risk" children	ongoing March/April of K year	teacher resource teachers and special education personnel

*How Is Monitoring and Evaluation
Carried Out?*

At What Point(s)?

By Whom?

p) - informal reassessment of "at risk" children	December/ May	teacher and resource teacher
- formal reassessment of "at risk" children	December/ May	teacher and resource teacher
q) conferences at which teacher reports (anecdotally) on childrens' progress (nominated children)	fall and end of school year, and as required	members of conference (teachers, special education teachers, principal, nurse, speech teacher, other appropriate special service personnel)

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